MEASUREMENT OF EMPLOYMENT AND UNEMPLOYMENT IN INDIA: SOME ISSUES

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Centre for Development Economics
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This paper offers a review of the concepts and definitions used in the NSS Employment-Unemployment Surveys (EUS, for short) which have remained virtually unchanged since they were introduced in the NSS 27th Round (1972-73) based on the analysis and recommendations in the Report of the Expert Group on Unemployment Estimate – better known as the Dantwala Committee Report (GOI, 1970). It also examines critically the employment-unemployment estimates derived/derivable from EUS and the use of such estimates for planning and policy.

Consider first the concept of work/employment adopted in the EUS.

Work is defined as engagement in economic activity i.e. any activity resulting in production of goods and services that add value to the national product. As per the United Nations System of National Accounts (UNSNA) 1993, all production of goods irrespective of whether it is entirely used for self-consumption by the producer households or it is partly or fully sold in the market and irrespective of whether its production and distribution is legal or illegal fall within the production boundary. However, in the case of services only those services that are at least partly marketed (with minor exceptions) fall within the production boundary. Consistent with the Indian System of National Accounts (ISNA), in the EUS, engagement in production of goods entirely for self-consumption by the producer household is considered as economic activity and hence work only in respect of such production in the primary sector. Further, processing of primary products (e.g. making butter or ghee or clarified butter from milk) entirely for self-consumption is also not covered in the ambit of economic
activity. However, own-account construction (e.g. building of house for one’s own use) is included as economic activity. Also, by convention, activities such as prostitution – which is a ‘marketed service’ with a clear link to earnings – are not considered as economic activities in ISNA and in the EUS. So that, as of now, the definition of work in the NSS Employment-Unemployment Surveys is not yet fully synchronized with the 1993 UN System of National Accounts.

We turn now to an examination of the employment-unemployment estimates derived/derivable from the NSS Employment-Unemployment Surveys and the use of such estimates.

Two features of the structure of work force, namely, (i) a dominant share of agricultural activities marked by seasonal variation, and, (ii) a very small share of regular wage/salary workers who may be presumed to have stability in employment characteristics, prompted the Dantwala Committee to recommend the canvassing of employment characteristics of the population over the year as a whole (i.e. with a reference period of 365 days) in addition to the current week – as was the practice till then.

Given the possibility of an individual being engaged in a multiplicity of activities over a year-long reference period, a majority time criterion was put in a place to yield estimates of employment and unemployment on the Usual Principal Status. In the first step, the population was classified as being in the labour force (LF) or outside the labour force (OLF) depending on which occupied 183 days or more in the preceding 365-days. The
majority time within the days in the labour force was used to classify those in the labour force as either employed or unemployed on the usual principal status. Further, to capture the labour input contribution of those classified either as unemployed or as being outside the labour force on the Urban Principal Status, we also have the concept of employment on usual subsidiary status – involving more or less regular work for at least 30-days in the year.

Most analysts of the employment situation in India, as well as the Planning Commission till the Tenth Five Year Plan, use the Usual (Principal plus Subsidiary) Status estimate of employment and unemployment.

An important issue here is whether we should continue to canvass questions on employment and unemployment over a long reference period of 365-days.

There, have, undoubtedly, been major changes in the structure of the economy since the early 1970s with the share of agriculture and allied activities in GDP in 2007-08 placed at less than 17.5 percent. However, what is critical in answering the question of whether we can dispense with employment-unemployment estimates on the usual status is the structure of employment at present.

Now, as per the results of the NSS 61st Round Employment-Unemployment Survey (see, Sundaram, 2007), despite a significant reduction in its share in the work force, agriculture remains the principal absorber of labour force in the country. In 2004-05, agriculture had
a 57 percent share in the total workforce, and, over the 2000-2005 period, the absolute number of workers in the sector increased by nearly 18 million or over 30 percent of the total incremental workforce.

Secondly, the share of regular wage/salary workers (or, RWS workers, for short) in the workforce continues to be relatively small – just 15 percent in 2004-05.

Further, even among the RWS workers, over time, the share of public sector has declined. Also, in recent years, we have the emergence of the phenomenon of RWS workers with short-term temporary contracts – the so called ‘temporary workers’ – especially in Urban India. This raises questions about the presumed stability of employment characteristics even in respect of the RWS workers\(^1\).

It is clear from the foregoing that, despite the changes in the structure of the economy since the early 1970s, canvassing the activity status of the population on a long reference period of 365 days continues to be necessary.

Until the Tenth Five Year Plan, the Planning Commission used to present its employment-unemployment exercises in terms of the Usual (principal plus subsidiary) status estimates. Beginning with the Tenth Plan, the Planning Commission has cast its

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\(^1\) This feature of the current employment scene would also suggest the need for obtaining more details about the nature of such “Temporary” contracts of workers who are classified as RWS-workers. Relevant issue here would be their spells of unemployment, if any, and the extent of “roll over” from one contract to another. Indicative of the presence of such “roll overs” is the fact that the proportion of workers who perceived their current employment to be ‘temporary’ is significantly smaller than those who reported themselves to be working without any written contract. (See, Sundaram, 2008).
employment planning exercises by reference to the employment-unemployment estimates on the Current Daily Status. This raises a number of issues and we examine them later in this paper.

Beginning with the National Accounts Statistics with 1993-94 as the base, the National Accounts Division of the Central Statistical Organization (NAD, for short) utilizes the usual status estimates from the quinquenmil NSS Employment-Unemployment Surveys for deriving the benchmark estimates of Gross Value Added (GVA, for short) in the unorganized segment of almost all of the non-agricultural sector.

The GDP contribution of the unorganized segment in each of the specified activities is derived as the product of (i) an estimate of GVA per worker in that activity drawn from the NSS Enterprise Surveys; and, (ii) an EUS-based estimate of labour input or ‘jobs’ in that activity.

Briefly stated, the total number of ‘jobs’ in a given activity – covering both the organized and the unorganized segments of the activity – is estimated as the sum of three components. First, there are the workers in that activity on the Usual Principal Status or, UPS workers, for short). The second component consists of Other UPS Workers (other than those already counted in the first component) who report subsidiary status work in that activity. The third and the final component consists of those workers in the specified activity who are workers only on the subsidiary status (or, SS workers, for short). From the sum of the three components defined above, the estimate of employment in the
organized segment (comprising of the public sector and the private sector enterprises covered under the Employment Market Information System) provided by the Directorate General of Employment and Training (DGE&T, for short) is deducted. The residual is used as the estimate of labour input in the unorganized segment of the given activity.

Before we examine some of the issues raised by the procedure outlined above of estimating the GDP-contribution of the unorganized segment of almost all of the non-agricultural sector in India, a few points need to be noted.

First, given the fact that the NSS survey-based estimates of total population are significantly lower than the corresponding estimates based on the Population Census (or, projections based on them) – by over 20 percent in Urban India – the estimate of workers on UPS and SS are obtained as the product of (i) the WFPR – estimate drawn from quinquennial Employment-Unemployment Survey; and, (ii) the Census-based estimate of population. Given that the extent of underestimation of the survey estimate relative to the Census-based estimate varies by gender and rural-urban location, the worker estimates are derived separately for rural males, rural females, urban males and urban females, and, then aggregated. Similar estimates of number of workers (or the unemployed) are derivable by gender, rural-urban location, states and regions within the states and they are aggregable on any dimension of choice.

Secondly, the Usual Status estimates are properly defined over persons and there are no problems in interpreting the resultant estimates in terms of the number of individuals
who are at work or are seeking or available for work. In the context of estimation of the GDP-contribution of the unorganized segment of the non-agricultural sector as per the procedure outlined above, this feature of the employment estimates on the Usual Principal/Subsidiary Status is very important. The importance of this feature of employment estimates on the Usual Status arises from the fact that the DGE&T estimates of employment in the organized sector are also in terms of number of persons – and, not in terms of persons weeks or person days.

This fact that the organized sector employment – which is deducted from the estimate of the total “jobs” in an activity to derive the count of jobs in the unorganized segment of that activity – is defined in terms of persons is also relevant in assessing suggestion recently made by a team of officers of the Survey Design & Research Division (SDRD) of the NSSO that the count of total ‘jobs’ in an activity be estimated to by reference to work force participation rates (WFPRs) on the Current Daily Status (See, GOI, NSSO-SDRD, 2008). For, as we will argue later in this paper, the CDS-estimates are not defined in terms of persons. They yield estimates of person-days in the workforce. And, there are serious problems in “deducting” an estimate of persons in organized sector employment in an activity from the count of total “jobs” in terms of person-days.

Let us consider now the issues raised by the procedure outlined above for the estimation of the GDP-contribution of the unorganized segment of almost all of the non-agricultural sector.
As noted earlier, the estimate of GVA per worker in the unorganized segment of a given economic activity in the non-agricultural sector is drawn from the NSS (unorganized sector) Enterprise Surveys.

In the NSS (unorganized sector) Enterprise Surveys, a worker is defined as one who participates in an economic activity, either full time or part-time (working less than or equal to half of the normal working hours of the enterprise) on a fairly regular basis. Further, a worker need not mean that the same person is working continuously. It only refers to a position. Hence, the notion of ‘jobs’ – rather than of workers. From this perspective, the inclusion of subsidiary work of Usual Principal Status Workers in the count of ‘jobs’ may not pose a “conceptual” problem.

In practice, however, there is or could potentially be a problem arising from the fact that while in the EUS the count of ‘jobs’ in a specified NIC-category is based on self-reporting by the worker, in the enterprise survey it is based on the reporting of employment by the enterprise/establishment. Apart from the issue of “acknowledgement” as a worker by the enterprise - which may be an issue for the larger enterprises in the unorganized sector - there is the issue of workforce supplied by other contractor enterprises. In the case of such workers, their emoluments are treated as intermediate inputs in the NSS enterprise surveys, and, it is possible that the NIC-Codes assigned to such workers relate to that of the “Contractor Enterprise”. Potentially, this could result in a mismatch of ‘jobs’ in a given NIC-category based on EUS and the
estimate of GVA – per worker in that NIC-category drawn from the NSS enterprise surveys.

This problem of **mismatch between the employment estimates drawn from a household employment survey and those based on reporting by establishments is possibly even more serious when the DGE&T estimates are used to subtract organized sector jobs from the total count of jobs to derive the estimate of Labour Input in the unorganized sector. [See, Sundaram (2008), for a set of alternative estimates of organized and unorganized sector employment based on NSS Employment-Unemployment Surveys].**

In conformity with the accepted standards of labour force surveys, in all the quinquennial employment-unemployment surveys the activity status of the population surveyed is also canvassed with the 7-days preceding the survey as the reference period. In fact, detailed activity status of the sample population is canvassed in respect of each day of the 7-day reference period. Further, the provision for recording pursuit of an activity with full-intensity (4 hours or more) or, half-intensity (one hour or more but less than 4 hours), implies that an individual could be reporting two activities for the same calendar day – each with half-intensity.

The estimates of workforce and labour force participation rates on both Current Weekly and the Current Daily Statuses are computed on the information on the activity status in the 7-days preceding the date of survey collected as stated above.
The estimates on the Current Weekly Status are derived on a ‘priority-cum-majority time’ criteria. In terms of the three broad activity categories of workers, unemployed, and, outside the labour force, the status of being at work (even if only for one half-day in the week) has priority over being unemployed (seeking/available for work at least for one half day) which, in turn, has priority over being outside the labour force. So that, only a person who had neither worked nor was seeking/available for work even for one-hour anytime during the reference week is considered as being outside the labour force on the current weekly status. The majority time criteria comes into play in the event of multiple activities during the reference week. Later in this paper we will offer a brief comment on the concept of Modified Current Weekly Status (MCWS) which is based on the activity status for the major part of the week i.e. 3.5 days or more, which has been revived recently by Krishnamurty and Raveendran [See Krishnamurty & Raveendran (2008)].

Estimates of workforce/labour force participation rates on the Current Daily Status are derived as a ratio with the aggregate of days in employment (labour force) in the numerator and the total number of ‘available’ days – equal to seven times the population – in the denominator.

To derive the days in employment/labour force/outside the labour force that defines the numerator, we start with the observations on the activity status provided by a moving sample of persons belonging to households surveyed on different days for each of the seven days of a moving reference week. Each type of days – employed, unemployed or
outside the labour force – are summed over individuals (each having a design-based weight) and across calendar days. In this aggregation, each day of activity with ‘full intensity’ is counted as one full day and that with ‘half intensity’ as one half-day, with two such ‘half-days’ counted as one. So that, what we have in the numerator is the aggregation of, say, employed days of individuals whose days in employment could (and does) range from ‘zero days’ to all 7-days and values in between in units of half-days.

Let us illustrate this by reference to the 61st Round (2004-05) estimate of Unemployment on the Current Daily Status for rural India. The numerator of the ratio, namely, the total number of person days in unemployment for rural males is estimated at a little under 110 million. And, with the total person days available – equal to seven times the estimated population of rural males – as the denominator, the proportion unemployed on the Current Daily Status is placed at 42 per 1000. (See GOI, 2006, p - 319).

Based on an analysis of the Unit Record Data of the NSS 61st Round Employment-Unemployment Survey, we present in Table 1 the distribution of rural males and rural females by the number of days in the week they were seeking/available for work during the week and their contribution to the total unemployed person days. As can be computed from this Table, a little under 48 percent of the total unemployed person days of rural males was contributed by just 2 percent of them who reported that they were seeking/available for work on all 7-days of the reference week. At the other end of the spectrum, 92.5 percent of rural males reported that, in the reference week, they were not seeking/available for work even for one half-day. That is, they were unemployed for
Zero-days, during the reference week. Of the balance, a little under 30 percent of the total unemployed person-days was contributed by 4 percent of rural male population who reported seeking/available for work between 0.5 day and 3.0 days in the reference week, and, a little over 22 percent by 1.5 percent of rural males who reported seeking/available for work for between 3.5 and 6.5 days during the reference week. [See Table 2 for these and parallel estimates for other population segments at the all-India level].

A further analysis shows that, among rural males, little under 51 percent of those seeking/available for work on all 7-days in the reference week are those classified as **workers on the Usual Principal Status** i.e. those who had reported themselves to be in the labour force for the major part of the year with a majority of the days in labour force being economically active. [See Table 3]

We have here a clear problem of inconsistency between the characterization of the population on the Usual Status and that on the Current Daily Status. To a lesser extent, this problem is also present in respect of those classified as workers on the Usual Subsidiary Status. Among rural males, such subsidiary status workers accounted for a further 6 percent of those reporting unemployment on all 7-days of the reference week. Among rural females reporting unemployment on all 7-days of the reference week, a little over to 45 percent of them were workers on the Usual Principal Status, with a further 9 percent of them being workers on the Usual Subsidiary Status². [See Table 3]

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² In order to check whether these proportions varied over the four quarters of the agricultural year 2004-05, we carried out a parallel exercise for the four sub-rounds.
The above noted problem is less acute in urban areas, with the proportion of those reporting unemployment on all 7-days of the reference week who are classified as workers on the Usual Status being 26 percent for urban males and just 17 percent for urban females. Taking both rural and urban populations together, close to 46 percent of those who reported being unemployed on all 7-days are classified as workers on the Usual Status – 39 percent on the Usual Principal Status and 6 percent on the Usual Subsidiary Status. In this context, it may be noted that close to 56 percent of the total person-days in unemployment came from those who reported being unemployed on all 7-days in the reference week.

This problem of a substantial proportion of those counted as unemployed on the current status being workers on the Usual Principal Status, illustrated above in respect of those reporting seeking/available for work on all 7-days of the reference week, becomes even more acute if we expand this analysis to all those who reported themselves to be seeking or available for work for a major portion of the week i.e. for 3.5 days or more. This would be the set of Unemployed on what Krishnamurty and Raveendran (Krishnamurty and Raveendran, 2008) call the modified current weekly status (MCWS, for short). As

In terms of the proportion of the population unemployed on the Current Daily Status (CDS), for rural males, at 38 per 1000, it was the lowest in the October-December quarter (sub-round 2) and the highest in the first sub-round (July-September) at 46 per 1000. For rural females, the proportion of population unemployed on CDS was the lowest in the July-September quarter (19 per 1000) and the highest in sub-round 4 (April-June) at 24 per 1000.

For both rural males and rural females, the sub-round with highest proportion of population unemployed on CDS (sub-round 1 for rural males and sub-round 4 for rural females) also records the highest proportion in the work force on UPSS (602 per 1000 for rural males and 607 per 1000 for rural males) and the lowest proportion unemployed on UPSS among persons unemployed on all 7-days of the reference week. Also, for both rural males and rural females, the lowest (highest) proportion in the WF (unemployed) on UPSS among those unemployed on all 7-days in the week occurs in the October-December quarter.
can be readily seen from Table 3, in the case of rural males, for example, the proportion such unemployed on MCWS who are workers on the Usual Principal Status increases from 51 percent (in the case of those unemployed on all 7-days of the reference week) to a shade under 68 percent. This is observed across all the four population segments. So that, taking all the four population segments together, close to 57 percent of the unemployed on MCWS are workers on the Usual Principal Status. If we add those classified as workers only on the Usual Subsidiary Status, the proportion of such unemployed on MCWS who are classified as workers on the Usual Status goes up to 64 percent.

Before reverting to our discussion of employment-unemployment estimates on the Current Daily Status, a brief comment on the concept of ‘Modified Current Weekly Status’. This is in fact a resurrection of an early suggestion of Late Professor Pravin Visaria. Now, the use of ‘3.5 days’ as a cut-off value to define majority time raises a more general question: do we want/expect that people are or should be in the labour force on all 7-days of the reference week? This is not just an academic question. Our analysis shows that, in rural areas, about 1.4 percent of rural males and about 1.2 percent of rural females are reported to have worked for 3.0 days in the reference week. Further, 1.6 percent of rural male population and 0.7 percent of rural female population reported themselves to be seeking/available for work for 3 days during the reference week. So that, adoption of, say, a 6-day week—for purposes of measuring work & unemployment—would significantly raise the size of the workforce/labourforce on MCWS.
A different kind of a problem of interpretation of the measures of unemployment on the Usual and Current Daily Statuses is posed by those who reported that they neither sought nor were they available for work for even one half-day during the reference week.

In the NSS Employment-Unemployment Surveys, an activity classification of the population on the Usual Principal Status is followed-up with a set of probing questions to find out whether and how many of the surveyed population at all sought work or were available for work in the preceding 365-days and, if yes, the period for which they sought or were available for work. And, tabulations based on the set of probing questions are available in the published reports.

At the all-India level, among rural males classified as self-employed on the Usual principal status a little under 82 percent (817 per 1000 to be exact) neither sought nor were available for work in the preceding 365 days. To put it differentially as per their responses to the follow-up questions, 18.3 percent of rural male who are classified as self-employed on the Usual Principal Status (UPS) sought/were available for work for at least some days on some months of the year. Now, a Usual Status x Daily Status cross-tabulation by broad activity status categories shows that among the same set of rural males classified as self-employed on the Usual Principal Status, 96.7 percent of them reported zero days of Unemployment during the reference week. So that, as per their reported activity-status during the reference week only 3.3 percent of them at all reported seeking/available for work i.e. a 15 percentage point divergence in the proportion at all
seeking/available for work as between the Usual and the Current Daily Status. In the case of rural males and rural females classified as Casual Labourers on the Usual Principal Status, the proportion of such workers who reported seeking or available for work for at least 0.5 days during the reference week (30.0 percent for rural males and 25.5 percent for rural females) is significantly smaller than the proportion of the same set of workers who reported seeking or available at least for some days for some months in the preceding 365 days: by 21 percentage points for rural male casual labourers and by as much as 29 percentage points for rural female casual labourers. Table 4 presents parallel set of numbers for other activity-status categories and other population segments.

As can be readily seen, this divergence is also quite significant among self-employed urban males and, for the self-employed and casual labourers among urban females.³

It follows from the above that a fair proportion of those who reported “zero days of unemployment” during the reference work are those who did report themselves to be seeking/available for work at least on some days on some months in the preceding 365 days. And, this proportion is sizeable for the rural casual labourers on the Usual Principal Status. At the very least, this would suggest that the claim that the estimates of unemployment on the Current Daily Status fully captures the non-utilisation of available labour time is open to some doubt.

³ Except in respect of Urban males classified as Casual Labourers, directionally, all the above stated results hold even if we treat all the not recorded cases as those who neither sought nor were available for work any time during the preceding 365 days.
It needs to be stressed that, in terms of individuals, the two types of problems discussed above – a proportion of those reporting unemployment on all 7-days of the reference week being workers on the Usual Principal Status and of those reporting zero days of unemployment during the reference week but reporting seeking/available for work in the preceding 365-days cannot be treated as off-setting one another.

The above leads us to examine the casting by the Planning Commission of its employment-unemployment exercises in the Tenth and the Eleventh Five Year Plan in terms of person-days of work and of person-days of unemployment. In matching the demand for and the supply of labour, on the supply side, the estimates of labour force person-days are derived as the product of the labour force participation rates on the Current Daily Status in a given population segment and an estimated/projected total population in that segment and summed across the population segments.

The draft Eleventh Plan chapter on Employment thus gives a figure of 36.564 million as unemployed on the Current Daily Status. As shown above, the CDS unemployment rate reflects an aggregation across individuals and calendar days of full-days and half-days of unemployment over a moving sample of seven days. As such, it may be treated as an estimate of the proportion of persons seeking/available for work on a typical day in the year.

The central question here is: can the product of the estimated population in the given population segment and the estimated proportion unemployed on Current Daily Status be
treated as the number of persons unemployed or even as person-years of unemployment? Such an inference carries with it the implicit assumption that each individual in the labour force on the Current Daily Status is or should be in the labour force on all 365-days in the year!

From an operational perspective also, the figure of 36.564 million as the number unemployed on the Current Daily Status reported in the Plan document does not mean that so many individuals are unemployed on all 365-days in the year. This does not hold good even in respect of those who reported seeking/available for work on all 7-days of the reference week – about 1.75 percent of the total population as estimated by the Survey.

In striking a demand-supply balance, this distinction between persons in the labour force/work force and person-years of work/unemployment is important because, on the employment generation side, person-days of employment is an appropriate unit of account only in a limited number of activities such as NREGP or other public works. In respect of all regular wage/salaried employment and in respect of all employment in the organized sector, the appropriate unit of account is number of persons employed.

Even in the case of activities where person-days of employment generated is a meaningful figure, we will be faced with the problem of converting them back into person-years of employment generated to be matched against the supply of labour
specified in terms of persons. The question is: how many person-days constitute a person year? Is it 273-days – as in the Revised Draft Sixth Five Year Plan – or 300 days or 365-days? Since on the supply side one person-year is, implicitly, specified as 365-days, even the use of a 300-days norm to convert person-days of employment generation say, under NREGP, into person years of labour demand, would overstate the generation of employment relative to the supply of labour on CDS-basis.

As far as the labour and employment exercises in the Eleventh (and, subsequent) Five Year Plan(s) are concerned, in our judgment these are best carried out in terms of labour force (workforce) participation rates on the Usual (Principal plus Subsidiary) Status (UPSS, for short). It may be noted that this was also the approach adopted by the Task Force on Employment Opportunities (GOI, 2001), as well as in all the Five Year Plans since the early 1970s up to and including the Ninth Five Year Plan.

In arguing for the use of UPSS-based estimates in our employment planning exercises, there is no presumption either that those in the workforce on UPSS are at work throughout the year or that the unemployed on UPSS are unemployed throughout the year.

Relying on published tables based on the follow-up questions to workers on the Usual Status, it is seen that roughly 25 percent of UPSS workforce in rural India and between 11 to 14 percent of UPSS workforce in Urban India were without work for at least one month in the 365 days preceding the Survey and were seeking or were available for work
at least for some days for one or more months during the year. As one would expect, this problem is particularly acute for those classified as Casual Labourers on UPSS. Thus, close to or above 50 percent of such workers in rural India and between 40 (males) and 44 (females) percent of Casual Labourers in Urban India reported themselves to be without work for at least one month and to be seeking/available for work for at least some days in the month(s) they were without work. This problem is the least for the RWS-Workers – between 4 to 5 percent for male workers and between 6 to 7.5 percent for female workers. Among the self-employed workers this problem is more widespread in rural India (between 7.50 and 11.00 percent).

From the perspective of employment planning, the above-noted information, while relevant, needs to be sharper and more focused. What the planner needs to know is how many persons are seeking or available for work for how many days during the different quarters of the year. This, we believe, can be obtained by appropriate changes in the reference period of the set of follow-up questions currently canvassed.

The broad conclusions derivable from our review of the concepts and definitions used in the NSS Employment-Unemployment Surveys and of the estimates derivable there from and the use thereof in our planning exercises may be summarized below:

(i) Further steps are needed to synchronize fully the definition of work adopted in the NSS Employment Surveys with the 1993 UNSNA;
(ii) The use of the EUS-based count of “jobs” in the estimation of GDP in the unorganized segment of almost the entire non-agricultural sector poses no conceptual problems. However, the problems of matching the count of “jobs” from the household survey with employment in the organized sector based on reporting by establishments and the possible mismatch of NIC-Categories arising from workers supplied by ‘contractor’ enterprises, remain;

(iii) The changes in the structure of GDP and of employment, while being quite substantial, are yet inadequate to give up the canvassing of the activity status of the population on the Usual Status. In fact, given the problems with the interpretation and use of the employment estimates on the Current Daily Status for employment planning and policy exercises discussed above, which are also carried over in the recently revived concept of Modified Current Weekly Status, the estimates based on the Usual Principal plus Subsidiary Status, with some additional characterization remain the best option for employment planning and policy analysis.
References


Table 1: Distribution of Rural Males & Rural Females by Number of Days Seeking/Available for Week During the Reference Week and their Contribution to Total Unemployed Person-days: All-India, 2004-05.

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<tr>
<td>4.5</td>
<td>93,537</td>
<td>32,454</td>
</tr>
<tr>
<td>5</td>
<td>1,644,249</td>
<td>710,041</td>
</tr>
<tr>
<td>5.5</td>
<td>65,453</td>
<td>9,348</td>
</tr>
<tr>
<td>6</td>
<td>423,023</td>
<td>156,893</td>
</tr>
<tr>
<td>6.5</td>
<td>7,541</td>
<td>0</td>
</tr>
<tr>
<td>7</td>
<td>7,492,731</td>
<td>3,923,223</td>
</tr>
<tr>
<td>Total</td>
<td>369,195,658</td>
<td>355,153,719</td>
</tr>
</tbody>
</table>

Total: 369,195,658 Males, 355,153,719 Females, 724,349,377 Total Unemployed Person-days
Table 2: Per 1000 Distribution of Persons and Person-days of Unemployment by Number of Days in the Reference Week for which Seeking/Available for work by Gender and Rural Urban Location: All-India, 2004-05

Per 1000 Distribution of Persons and of Unemployed Person-Days by Number of Days Seeking/Available for work in the Reference Week

<table>
<thead>
<tr>
<th>Population Segment</th>
<th>Number of Days Seeking/Available for Work</th>
<th>Zero Days</th>
<th>0.5 – 3.00</th>
<th>3.5 – 6.5</th>
<th>All 7-days</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rural Male</td>
<td>Persons</td>
<td>925</td>
<td>40</td>
<td>15</td>
<td>20</td>
<td>1000 (369.2)</td>
</tr>
<tr>
<td></td>
<td>U.E. Person-days</td>
<td>NIL</td>
<td>298</td>
<td>223</td>
<td>479</td>
<td>1000 (109.5)</td>
</tr>
<tr>
<td>Rural Female</td>
<td>Persons</td>
<td>966</td>
<td>16</td>
<td>7</td>
<td>11</td>
<td>1000 (355.2)</td>
</tr>
<tr>
<td></td>
<td>U.E. Person-days</td>
<td>NIL</td>
<td>247</td>
<td>219</td>
<td>534</td>
<td>1000 (51.4)</td>
</tr>
<tr>
<td>Urban Male</td>
<td>Persons</td>
<td>938</td>
<td>24</td>
<td>9</td>
<td>29</td>
<td>1000 (129.0)</td>
</tr>
<tr>
<td></td>
<td>U.E. Person-days</td>
<td>NIL</td>
<td>168</td>
<td>129</td>
<td>703</td>
<td>1000 (37.8)</td>
</tr>
<tr>
<td>Urban Female</td>
<td>Persons</td>
<td>978</td>
<td>5</td>
<td>2</td>
<td>15</td>
<td>1000 (118.6)</td>
</tr>
<tr>
<td></td>
<td>Person-days</td>
<td>NIL</td>
<td>95</td>
<td>82</td>
<td>823</td>
<td>1000 (14.5)</td>
</tr>
</tbody>
</table>

Notes: 1 Author’s estimate from Analysis of in a Unit Record Data.
2 Figures within brackets relate to the estimated number (in millions) of persons/Unemployed (U.E.) Person-days.
Table 3: Per 1000 Distribution of Persons Seeking/Available for work on all 7-days of the Reference Week by Broad Usual Activity Status by Gender and Rural – Urban Location: All-India, 2004-05.

Per 1000 Distribution of Persons Seeking/Available for work by Usual Activity Status

<table>
<thead>
<tr>
<th>Activity Status</th>
<th>Rural Males</th>
<th>Rural Females</th>
<th>Urban Males</th>
<th>Urban Females</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self-employed on Usual Principal Status</td>
<td>149 (137)</td>
<td>76 (62)</td>
<td>55 (91)</td>
<td>16 (23)</td>
<td>97 (101)</td>
</tr>
<tr>
<td>RWS-worker on Usual Principal Status</td>
<td>15 (10)</td>
<td>7 (5)</td>
<td>64 (51)</td>
<td>43 (37)</td>
<td>27 (18)</td>
</tr>
<tr>
<td>Casual Labourers on Usual Principal Status</td>
<td>346 (531)</td>
<td>369 (544)</td>
<td>95 (229)</td>
<td>75 (141)</td>
<td>268 (449)</td>
</tr>
<tr>
<td>Work Force on Usual Principal Status</td>
<td>510 (678)</td>
<td>452 (611)</td>
<td>214 (371)</td>
<td>133 (201)</td>
<td>392 (568)</td>
</tr>
<tr>
<td>Work Force on Usual Subsidiary Status</td>
<td>58 (68)</td>
<td>94 (94)</td>
<td>53 (53)</td>
<td>35 (54)</td>
<td>63 (70)</td>
</tr>
<tr>
<td>Unemployed on UPSS</td>
<td>417 (243)</td>
<td>426 (266)</td>
<td>713 (556)</td>
<td>761 (668)</td>
<td>520 (339)</td>
</tr>
<tr>
<td>Outside Labour Force on UPSS</td>
<td>15 (11)</td>
<td>28 (29)</td>
<td>21 (20)</td>
<td>71 (78)</td>
<td>25 (22)</td>
</tr>
<tr>
<td>All</td>
<td>1000</td>
<td>1000</td>
<td>1000</td>
<td>1000</td>
<td>1000</td>
</tr>
<tr>
<td>Number of Persons (in million)</td>
<td>7.5 (13.0)</td>
<td>3.9 (6.5)</td>
<td>3.8 (4.9)</td>
<td>1.7 (2.0)</td>
<td>16.9 (26.4)</td>
</tr>
</tbody>
</table>

Notes: 1. Estimates are based on an analysis of Unit Record Data
2. Figures within brackets relate to those who are seeking/available for work for the major part of the reference week i.e. for 3.5 days or more.
3. UPSS: Usual (principal plus subsidiary) status.
Table 4: Proportion (per 1000) of Self-Employed, Regular Wage Employee and Casual Labourers on Usual Principal Status who had Reported Zero Days of Unemployment in the Reference Week and of those who had NOT sought/available for work in the Preceeding 365-days by Gender and Rural-Urban Location: All-India, 2004-05

<table>
<thead>
<tr>
<th>Activity Status/</th>
<th>Self-Employed</th>
<th>RWS-Workers</th>
<th>Casual Labourers</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Zero Days UE on CDS</td>
<td>NOT Sought/Available for work</td>
<td>Zero days UE on CDS</td>
</tr>
<tr>
<td>Rural Males</td>
<td>967</td>
<td>817 (860)</td>
<td>991</td>
</tr>
<tr>
<td>Rural Females</td>
<td>985</td>
<td>825 (856)</td>
<td>992</td>
</tr>
<tr>
<td>Urban Males</td>
<td>971</td>
<td>899 (942)</td>
<td>991</td>
</tr>
<tr>
<td>Urban Females</td>
<td>983</td>
<td>891 (924)</td>
<td>988</td>
</tr>
</tbody>
</table>

Notes:  
(i) Columns (2), (4) and (6) are based on computations by the author from Unit Record Data.  
(ii) Columns (3), (5) and (7) are drawn from Table 65, NSS Report No. 515: Employment-Unemployment Situation in India, 2004-05, pp. 548-550 (GOI, 2006).  
(iii) Figures within brackets in columns (3), (5) & (7) reclassifies the ‘not recorded’ category as those who had not sought/were available for work in the preceding 365-days.