

# POOLED REPORT ON HOUSEHOLD CONSUMER EXPENDITURE & EMPLOYMENT AND UNEMPLOYMENT IN TELANGANA

NSS 68th ROUND—2011-12 (Central and State Sample Data)



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# **Preface**

The National Sample Survey (NSS) was set up in 1950, to bridge large gaps in statistical data needed for planning, policy formulation and computation of national income aggregates, especially in respect of the unorganized and household sector of the economy. NSSO has been conducting nationwide multi-subject, integrated, large-scale sample survey in the form of successive rounds covering various aspects of social, economic, demographic, industrial and agricultural statistics.

The necessity for pooling the Central and State data arose due to the growing need for improving the precision of estimates of policy parameters such as the incidence of poverty, State Domestic Product (SDP), District Domestic Product (DDP) etc and for strengthening the database at district level required for decentralized governance.

The National Statistical Commission in its report has observed the importance of pooling in the statement: The statistical agencies of different State governments have been participating in the NSS programme and canvassing the same questionnaires in matched samples of households in their respective states following identical concepts, definitions and procedures. Results from the central samples and state sample(s) have occasionally been compared. The main purpose of the programme is to pool the two samples and obtain dependable estimates for regions within the states.

The DES Telangana has prepared pooled report on Household Consumer Expenditure and Employment and Unemployment for the state of Telangana on NSS 68<sup>th</sup> round with doubled sample size of central sample.

In this regard, I wish to appreciate the work done by the field staff and supervisors who worked whole heartedly to make the survey a success. The efforts made by the SES and EDP divisions of DES, Telangana in guiding field staff and in the processing of data and in preparation of this report in time needs to be appreciated.

I hope this report will be of very much use to the planners, policy makers, academicians and researchers. The Department expects suggestions and comments from readers for further improvement in the future endeavours of this kind.

Hyderabad Date: 10-01-2015 Dr.V.Subramanyam Director

# **HIGHLIGHTS**

Number of samples surveyed		Rural	Urban
	Central	188	176
	State	374	350
Number of Households surveyed	Central	4512	4224
	State	8976	8400
Number of persons covered	Central	17656	16103
-	State	37690	33081

Household Consumer Expenditure (in Rs.)									
MPCE (Rs.) Rural (URP)	Central	State	Pooled						
Food	697.57	643.95	652.78						
Non-Food	757.50	832.53	830.59						
Total	1455.07	1476.47	1483.37						
MPCE (Rs.) Urban (URP)	Central	State	Pooled						
Food	968.13	949.34	958.64						
Non-Food	1566.79	1788.08	1773.91						
Total	2534.92	2737.42	2732.55						
MPCE (Rs.) Rural (MRP)	Central	State	Pooled						
Food	697.57	643.95	652.78						
Non-Food	835.67	857.10	857.05						
Total	1533.24	1501.05	1509.83						
MPCE (Rs.) Urban (MRP)	Central	State	Pooled						
Food	968.13	949.34	958.64						
Non-Food	1703.14	1841.01	1769.21						
Total	2671.27	2790.35	2727.85						
MPCE (Rs.) Rural (MMRP)	Central	State	Pooled						
Food	834.13	781.46	788.10						
Non-Food	787.88	817.97	803.20						
Total	1732.01	1590.43	1591.30						
MPCE (Rs.) Urban (MMRP)	Central	State	Pooled						
Food	1112.97	1269.49	1113.50						
Non-Food	1569.58	1647.64	1605.16						
Total	2682.55	2917.13	2718.66						

Employment and Unemployment (per 1000 distribution)									
Labour Force Participation Rate (LFPR) -Rural	Central	State	Pooled						
PS+SS	526	515	525						
CWS	517	510	513						
CDS	506	502	506						
Labour Force Participation Rate (LFPR) – Urban	Central	State	Pooled						
PS+SS	368	358	358						
CWS	367	357	358						
CDS	366	358	358						
Workforce Participation Rate (WPR) - Rural	Central	State	Pooled						
PS+SS	521	511	519						
CWS	511	504	506						
CDS	497	496	497						
Workforce Participation Rate (WPR) – Urban	Central	State	Pooled						
PS+SS	355	350	350						
CWS	354	350	350						
CDS	352	350	350						
Workforce Participation Rate (WPR) – Rural	Central	State	Pooled						
Male	571	601	599						
Female	471	425	429						
Persons	521	511	519						
Workforce Participation Rate (WPR) – Urban	Central	State	Pooled						
Male	555	538	539						
Female	150	157	154						
Persons	355	350	350						

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#### Chapter - 1

# **Introduction: Coverage, Concepts and Definitions**

#### 1.1 Introduction

The National Sample Survey (NSS) was set up in 1950, to bridge large gaps in statistical data needed for planning, policy formulation and computation of national income aggregates, especially in respect of the unorganized and household sector of the economy. NSSO has been conducting nationwide multi-subject, integrated, large scale sample surveys in the form of successive rounds covering various aspects of social, economic, demographic, industrial and agricultural statistics. These surveys are undertaken striking a balance between the urgent and contemporary need for reliable statistical data on different topics and the constraints of limited resources, both physical and financial.

The states have been participating in the NSS surveys from 14<sup>th</sup> round (1958) onwards by using the same concepts, definitions and procedures and by adopting the same sample design based on independently drawn sample as that of NSSO. These two field operations are generally referred as Central and State samples of the National Sample Survey. Sample sizes of central and state samples are equal for most of the States/UTs (equal matching sample). But there are some States where the number of samples surveyed by State statistical agencies is double to that of the size of the central samples.

# 1.2 Subject Coverage

The 68<sup>th</sup> round (July 2011 – June 2012) of NSS was earmarked for survey of **Household Consumer Expenditure** and **Employment and Unemployment.**The last survey on these subjects was covered in 66<sup>th</sup> round of NSS (2009-10) which was eight quinquennial survey in the series on household consumer expenditure and employment and unemployment.

# 1.3 Objective of the Survey

# 1.3.1 **Consumer Expenditure Survey (CES):**

Monthly Per Capita Expenditure (MPCE) as an indicator of level of living is both simple and universally applicable. Average MPCE of any sub-population of the state (any region or population group) is a single number that summarises the level of living of that population. It is supplemented by the distribution of MPCE, which highlights the differences in level of living of the different parts of the population. More detailed analysis of the distribution of MPCE reveals the proportion and absolute numbers of the poor with respect to a given poverty line. The data is collected not only on consumption level but also on the pattern of consumption, the CES has another important use. To work out consumer price indices (CPIs) which measure the general rise in consumer prices, one needs to know not only the price rise for each commodity group but also the budget shares of different commodity groups (used as weights) The budget shares as revealed by the NSS CES are being used for a long time to prepare what is called the weighing diagram for official compilation of CPIs.

# 1.3.2 Employment and Unemployment

The basic objective of the employment and unemployment survey of NSSO is to get estimates of the employment and unemployment characteristics at national and state level. The statistical indicators on labour market are required for planning, policy and decision making at various levels, both within government and outside. Some of the important uses of these indicators include use by the Planning Commission in evolving employment strategy, use by National Accounts Division in estimating gross domestic product using sector wise workforce participation, and use by various researchers to analyse the condition of the labour market. The data collected in NSS employment-unemployment surveys was widely used by the National Commission for Enterprises in the Unorganised Sector (NCEUS), 2009. Using the data collected from employment and unemployment surveys, indicators will be generated on labour force participation rate, worker population ratio, unemployment rates, employment in informal sector, informal employment, wages of employees, etc.

# 1.4 Period of Survey

The period of survey is of one year duration starting on 1<sup>st</sup> July 2011 and ending on 30<sup>th</sup> June 2012. The survey period of this round will be divided into four subrounds of three months duration each as follow:

sub-round 1: July – September 2011 sub-round 2: October – December 2011 sub-round 3: January – March 2012 sub-round 4. April – June 2012

In each of these four sub-rounds equal number of sample villages/blocks (FSUs) will be allotted for survey with a view to ensuring uniform spread of sample FSUs over the entire survey period.

# 1.5 Schedules of enquiry

The following schedules of enquiry will be canvassed;

Schedule 0.0 : list of households Schedule 1.0 : consumer expenditure

Schedule 10 : employment and unemployment

#### 1.6 Concepts and Definitions

- **1.6.1 House**: Every structure, tent, shelter, etc. is a house irrespective of its use. It may be used for residential or non-residential purpose or both or even may be vacant.
- **1.6.2 Household**: A group of persons normally living together and taking food from a common kitchen will constitute a household. It will include temporary stayaways (those whose total period of absence from the household is expected to be less than 6 months) but exclude temporary visitors and guests (expected total period of stay less than 6 months).
- **1.6.3 Household size**: The number of members of a household is its size.

**1.6.4 Household type**: The household type is based on the sources of the household's income during the 365 days preceding the date of survey. For this purpose, only the household's income (net income not gross income) from economic activities is to be considered; but the incomes of servants and paying guests are not to be taken into account.

In **rural** areas, a household will belong to any one of the following six household types:

self-employed in agriculture self-employed in non-agriculture regular wage/salary earning casual labour in agriculture casual labour in non-agriculture others

for **urban** areas, the household types are: self-employed regular wage/salary earning casual labour others

- **1.6.5 Household monthly per capita expenditure**: Household consumer expenditure is measured as the expenditure incurred by a household on domestic account during a specified period, called reference period. It also includes the imputed values of goods and services, which are not purchased but procured otherwise for consumption. In other words, it is the sum total of monetary values of all the items (i.e., goods and services) consumed by the household on domestic account during the reference period.
- **1.6.5.1 Uniform Reference Period MPCE** (or **MPCEURP**): This is the measure of MPCE obtained by the NSS consumer expenditure survey (CES) when household consumer expenditure on each item is recorded for a reference period of "last 30 days" (preceding the date of survey).
- **1.6.5.2 Mixed Reference Period MPCE** (or **MPCEMRP**) This is the measure of MPCE obtained by the CES when household consumer expenditure on items of clothing and bedding, footwear, education, institutional medical care, and durable goods is recorded for a reference period of "last 365 days", and expenditure on all other items is recorded with a reference period of "last 30 days".
- **1.6.5.3 Modified Mixed Reference Period MPCE** (or **MPCEMMRP**) This is the measure of MPCE obtained by the CES when household consumer expenditure on edible oil, egg, fish and meat, vegetables, fruits, spices, beverages, refreshments, processed food, pan, tobacco and intoxicants is recorded for a reference period of "last 7 days", and for all other items, the reference periods used are the same as in case of Mixed Reference Period MPCE (MPCEMRP).
- **1.6.6 Economic Activity**: Any activity that results in production of goods and services that adds value to national product is considered as an economic activity. The economic activities have two parts market activities and non-market activities. Market activities are those that involve remuneration to those who perform it, i.e., activity performed for pay or profit. Such activities include production of all goods and services for market including those of government services, etc. Non-market activities are those involving the production of primary commodities for own consumption and own account production of fixed assets.

- **1.6.7 Activity status**: Determination of activity status is the first and foremost step in the employment-unemployment surveys. Each person of the selected households is assigned a unique activity status for which further detailed information is collected. It is the activity situation relating to participation in economic or non-economic activities in which a person is found engaged during a reference period.
- **1.6.8 Usual Principal Activity Status**: The activity status on which a person spent relatively longer time (**major time criterion**) during the 365 days preceding the date of survey is considered the usual principal activity status (PS) of the person.
- **1.6.9 Subsidiary Economic Activity**: A person whose principal usual status is determined on the basis of the major time criterion may have pursued some economic activity **for 30 days or more** during the reference period of 365 days preceding the data of survey. The status in which such economic activity is pursued during the reference period of 365 days preceding the date of survey is the subsidiary economic activity (SS) of the person.
- **1.6.10 Current weekly activity status** (CWS) of a person is the activity status obtaining for a person during a reference period of 7 days preceding the data of survey **on the basis of a certain priority cum major time criterion**.
- **1.6.11 Current daily activity status** (CDS) for a person is determined on the basis of his/her activity status on each day of the reference week **using a priority cum major time criterion** (day to day labour time disposition).
- **1.6.12 Labour Force Participation Rate**: Labour force, or in others words, the 'economically active' population, refers to the population which supplies or seeks to supply labour for production and, therefore, includes both 'employed' and 'unemployed' persons. The labour force participation rate (LFPR) is defined as the number of persons/ person-days in the labour force per 1000 persons/person-days.
- **1.6.13** Workforce participation rates/Worker population ratio: The estimate of employed (or worker) in the usual status (ps) (i.e, usual principal status) gives the number of persons who worked for a relatively long part of the 365 days preceding the date of survey. The work force in the usual status (ps+ss) is obtained by considering the usual principal status and the subsidiary status together. The work force in the usual status (ps+ss) includes (a) the persons who worked for a relatively long part of the 365 days preceding the date of survey and (b) the persons from among the remaining population who had worked at least for 30 days during the reference period of 365 days preceding the date of survey. The number of persons/person-days employed per thousand persons/ person-days is referred to as workforce participation rates (WFPR) or worker population ratio (WPR).

# Chapter - 2

# Pooling of Central and State sample data of NSS

# 2.1 Objective of Pooling

One of the objectives of States participation in the NSS surveys is to provide a mechanism by which sample size will be increased and the pooling of the two sets of data would enable better estimate at lower sub state level, particularly at district level. At the State level, this will result in increased precision of the estimates and at disaggregated level, estimates will be more stable. But the major benefit will be derived in the case of estimates are generated at sub-state level like NSS region/districts.

# 2.2 Emerging need for pooling of estimates

The constitutional 73rd and 74th amendments envisage a major reform of governance which gives greater responsibilities and powers to the Panchayats and Nagar Palikas and offers opportunity for local planning, effective implementation and monitoring of various social and economic development programmes. This has enhanced the demand for local level statistics and necessitated requirement of developing basic capabilities at grass root levels to organize such statistics in a harmonious manner at district and sub-district level.

Further, the state level estimates generated by NSSO are considered to be reliable for important characteristics such as average monthly per capita expenditure of households, worker participation ratio, gross value added per worker etc. The reliability of these estimates at district level are questionable. The NSSO does not release sub-state level estimates mainly due to insufficient sample size.

Therefore, pooling of Central and State samples data is being considered as one of the important way out of the problem of insufficient sample size to generate parameters at district level.

# 2.3 Committee on pooling:

National Statistics Commission (NSC) constituted the committee on pooling of central and state sample data of NSS under the chairmanship of Prof. R. Radhakrishna vide order no.8(64)/2010-NSC, 30<sup>th</sup> July, 2010. The terms of reference of the committee are as follows.

- Conditions to be fulfilled for pooling of central and state sample data of NSS
- Methodology for pooling
- Time frame by which the exercise needs to be completed by each state
- Generating weighing diagrams from the pooled data at sub-state level for the purpose of consumer price indices (Rural and Urban) including occupation specific indices such as CPIAL, CPIIW etc., from NSS data on consumer expenditure surveys (Quinquennial and thin sample)
- Identification of district level parameters

National Statistical Commission recommendation: "The State sample data should be processed regularly within a reasonable time after the completion of fieldwork and attempts should be made to obtain and utilize pooled estimates by combining central and state samples"

# 2.4 Parameters considered for pooling

Considering the smaller sample size at district level following broad parameters were considered for pooling.

- a) Household size, sex, age
- b) MPCE of Food, Non-Food and Total MPCE derived from detail item from URP, MRP and MMRP
- c) Activity status principal with subsidiary, weekly, daily status and their intensity.

# 2.5 Thirteenth (13<sup>th</sup>) Finance Commission Grants

The Government of India has provided financial assistance to the State Government under  $13^{\text{th}}$  for improving District and State Statistical Systems which should be utilized by the State Government to fill the gaps of statistical infrastructure.

The pooling of central and state data of NSS is one of the milestones to be achieved under 13<sup>th</sup> FC grants.

In view of the above, the DES has doubled the sample size to that of the central sample size from NSS 67<sup>th</sup> round onwards to generate the reliable district level estimates by pooling the central and state sample data of NSS.

# 2.6 Testing pool ability and Methodology for pooling

# 2.6.1 Testing poolability of central and state sample

**2.6.1.1** Though the central sample and state sample are drawn independently following identical sampling design with same concepts, definitions and instructions to collect the state sample data but due to lack of adequate training of field and processing staff of State DES, unit level data in some cases are not properly validated. There is also expected agency bias in the two sets of data generated by different agencies. As such they cannot be merged for generating pooled estimate without testing that the samples are realized from identical distribution function. Since the parametric distribution of the sample mean is unknown one may adopt non-parametric tests such Run test, Median test, chi-square test etc to test that the samples are coming from identical distribution function.

#### 2.6.1.2 Median test

In <u>statistics</u>, the median test is a special case of <u>Pearson's Chi-square test</u>. It tests the <u>null hypothesis</u> that the <u>medians</u> of the <u>populations</u> from which two <u>samples</u> are drawn, are identical. Observations in each sample are assigned to two groups, one consisting of data whose values are higher than the median value in the two groups combined, and the other consisting of data whose values are at the median or below. A Pearson's Chi-square test is then used to determine whether the observed frequencies in each group differ from expected frequencies derived from a <u>distribution</u> combining the two groups.

Let m\* be the median of the pooled sample data. Construct 2 X 2 contingency table as below and use chi-square test if State sample and Central sample have identical median.

Sample-type	no d obs	Total	
	<= m*	> m*	
State Sample	N <sub>11</sub>	N <sub>12</sub>	$N_{1.}$
<b>Central Sample</b>	N <sub>21</sub>	N <sub>22</sub>	$N_{2.}$
Total	N <sub>1</sub>	N <sub>2</sub>	Ν

Observed frequency of each cell  $O_{ij} = N_{ij}$  where i = 1 to 2, j = 1 to 2.

Expected frequency of each cell  $E_{ij} = (N_{i.} * N_{.j})/N_{..}$  where i = 1 to 2, j = 1 to 2.

$$\chi^2$$
 Value =  $\sum_{i=1}^2 \sum_{j=1}^2 (O_{ij} - E_{ij})^2 / O_{ij}$  with degrees of freedom = (2-1)\*(2-1)

#### 2.6.1.3 Wald-Wolfowitz run test

Suppose X and Y are independent random samples with cumulative distribution function (CDF) as  $F_s(x)$  and  $F_c(y)$ . Null Hypothesis to be tested is  $H_0$ :  $F_s(x) = F_c(x)$  for all x against alternative Hypothesis is  $H_1$ :  $F_s(x) <= F_c(x)$  for all x and  $F_s(x) < F_c(x)$  for some x. Let  $x_1, x_2, \ldots, x_m$  be iid observation from state sample with distributive function  $F_s$  and  $y_1, y_2, \ldots, y_n$  be iid observation from central sample with distributive function  $F_c$ . Pool the data and order them with respect to comparable characteristic under consideration say monthly per capita expenditure (MPCE). In the pooled order sequence put "1" for X and "0" for Y. Let U be the total runs observed where 'run' is a sequence of adjacent equal symbols. For example, following sequence: 11110001110011111110000 is divided in six runs, three of them are made out of "1" and the others are made out of "0". The number of runs U is a random variable whose distribution for large sample can be treated as normal with:

mean: 
$$\frac{2mn}{m+n}+1$$
 variance:  $\frac{2mn(2mn-m-n)}{(m+n)^2(m+n-1)}$ 

After normalizing the variable U one may use one sided z-test for testing the Null hypothesis. In extreme case the value of U will be 2 meaning by observed characteristic of all the observation of one sample is less than the other samples.

One of the limitations of this test is when there is a tie between two samples in the observed value. One has to resolve ties in usual manner. However if there is large number of ties which is bound to occur specially for qualitative attributes like education level, activity status etc, this test is not recommended. This test can be well applied for a continuous variable such as MPCE which are less prone to ties. For discrete variable chi-square test is recommended.

#### 2.6.1.4 Parametric test

**Aggregate estimate**: Let  $t_{yc}$  and  $t_{ys}$  be the estimate of Y at domain level of pooling based on central and state sample respectively with corresponding variances  $V(t_{yc})$  and  $V(t_{ys})$ . For large sample, making all assumption of parametric test, one may use Z-Statistic to test the null hypothesis  $H_0$   $E(t_{yc}) = E(t_{ys})$  where E stands for expectation.

$$\mathbf{Z} = \frac{(t_{yc} - t_{ys})}{\sqrt{(V(t_{yc}) + V(t_{ys}))}}$$

 $V(t_{vc})$  and  $V(t_{vs})$  could be estimated as

$$V(t_{yc}) = \sum_{l} (t_{ycl} - t_{yc2})^2 / 4$$
,  $V(t_{ys}) = \sum_{l} (t_{ysl} - t_{ys2})^2 / 4$  based on sub-sample 1 & 2

estimates where  $\sum_{i}$  stands for summing over stratum x sub-stratum level variance at the domain of pooling.

**Estimate of rate**: Let  $r_c$  and  $r_s$  be the estimate of population rates  $R_c$  and  $R_s$  ie Y/X based on central and state sample respectively with corresponding mean square error MSE( $r_c$ ) and MSE ( $r_s$ ). For large sample, making all assumption of parametric test, one may use Z-Statistic to test the null hypothesis  $H_0$  E( $r_c$ )=E( $r_s$ ) where E stands for expectation.

$$\mathbf{Z} = \frac{(r_c - r_s)}{\sqrt{(MSE(r_c) + MSE(r_s))}}$$

 $MSE(r_c)$  and  $MSE(r_s)$  are estimated as follows:

$$mse(r_c) = (\stackrel{\frown}{V}(t_{yc}) - 2 * r_c \stackrel{\frown}{Cov} (t_{yc}, t_{xc}) + r_c^2 * \stackrel{\frown}{V} (t_{xc})) / t_{xc}^2$$

$$mse(r_s) = (\stackrel{\frown}{V}(t_{ys}) - 2 * r_s \stackrel{\frown}{Cov} (t_{ys}, t_{xs}) + r_s^2 * \stackrel{\frown}{V} (t_{xs})) / t_{xs}^2$$

where

$$\hat{V}(t_{yc}) = \sum_{l} (t_{yc1} - t_{yc2})^2 / 4 \hat{V}(t_{ys}) = \sum_{l} (t_{ys1} - t_{ys2})^2 / 4$$

$$V(t_{xc}) = \sum_{l} (t_{xc1} - t_{xc2})^2 / 4$$
,  $V(t_{xs}) = \sum_{l} (t_{xs1} - t_{xs2})^2 / 4$ 

$$\hat{Cov}$$
 (t<sub>yc</sub>, t<sub>xc</sub>)=  $\sum_{l} (t_{yc1} - t_{yc2})(t_{xc1} - t_{xc2})/4$  based on sub-sample 1 & 2 estimates.

where  $\sum_{l}$  stands for summing over stratum x sub-stratum level variance, covariance at the domain of pooling.

# 2.7 Methodology for pooling

#### Pooling by inverse weight of the variance of the estimates

**2.7.1 Aggregate estimate**: For any characteristic, consider the state sample [s] in the form of two independent sub- sample s1 and s2 and the central sample [c] in the form of two independent sub- sample c1 and c2. Based on this, the respective estimates for state and central can be computed as:

$$t_s = \sum_{l} (t_{s1} + t_{s2})/2$$
 and  $t_{c} = \sum_{l} (t_{c1} + t_{c2})/2$ 

Pooled estimate leading to optimum combination of these two estimates is given by weighing with inverse of the variance of the estimate. Thus the pooled estimate is given by:

$$T_p = \frac{V(t_c)t_s + V(t_s)t_c}{V(t_c) + V(t_s)} \text{ with } V(T_p) = \frac{V(t_c)V(t_s)}{V(t_c) + V(t_s)}$$

In general  $V(t_c)$  and  $V(t_s)$  are unknown and can be estimated as

$$\hat{V}(t_c) = \sum_{l} (t_{c1} - t_{c2})^2 / 4, \hat{V}(t_s) = \sum_{l} (t_{s1} - t_{s2})^2 / 4$$

where  $\sum_{l}$  stands for summing over stratum x sub-stratum level variance at the domain of pooling.

Thus pooled estimate and estimate of pooled variance is given by

$$t_{p} = \frac{\stackrel{\wedge}{V}(t_{c})t_{s} + \stackrel{\wedge}{V}(t_{s})t_{c}}{\stackrel{\wedge}{V}(t_{c}) + \stackrel{\wedge}{V}(t_{s})}, \quad \stackrel{\wedge}{V}(t_{p}) = \frac{\stackrel{\wedge}{V}(t_{c})\stackrel{\wedge}{V}(t_{s})}{\stackrel{\wedge}{V}(t_{c}) + \stackrel{\wedge}{V}(t_{s})}$$

- **2.7.2** By virtue of weighing the two estimates at the domain level at which two estimates are pooled, the pooled estimate will always lie between the central and state sample estimates.
- **2.7.3 Estimate of rate**: Let  $r_c$  and  $r_s$  be the estimate of  $R_c$  and  $R_s$  ie Y/X based on central and state sample respectively with corresponding estimated mean square error  $mse(r_c)$  and  $mse(r_s)$ . The pooled estimate and estimate of variance of pooled ratio estimate may be given by:

$$r_{p} = \frac{mse(r_{c})r_{s} + mse(r_{s})r_{c}}{mse(r_{c}) + mse(r_{s})}, \quad mse(r_{p}) = \frac{mse(r_{c})mse(r_{s})}{mse(r_{c}) + mse(r_{s})}$$

Where  $mse(r_c)$  and  $mse(r_s)$  are calculated using formula given in para 1.5.2 above. Alternatively one can generate the pooled estimate of aggregate by inverse weight of estimate of variance obtained from central and state sample using formula given in para 2.1.1 for the characteristics x as well as y and obtain the pooled estimate of ratio as ratio of pooled estimate of aggregate. This will ensure consistency between pooled estimates of aggregate and the pooled estimate of ratio.

Let  $t_{xp}$  and  $t_{yp}$  be the pooled estimate of aggregate for the parameter X and Y. The pooled estimate of R (i.e Y/X) is given by

 $r_{p=}$   $t_{yp}$  /  $t_{xp}$  where  $t_{yp}$  =  $at_{yc}$  +  $bt_{ys}$  and  $t_{xp}$  =  $ct_{xc}$  +  $dt_{xs}$  and (a, b), (c, d) are the estimated inverse variance weight pair of the characteristic x and y respectively.

The estimated mse of pooled ratio estimate  $r_p$  is given by:

mse(r<sub>p</sub>) = 
$$(\hat{V}(t_{yp}) - 2 \quad r_p \stackrel{\circ}{Cov}(t_{yp}, t_{xp}) + r_p^2 \stackrel{\circ}{V}(t_{xp})) / t_{xp}^2$$
  
where  $\hat{V}(t_{yp}) = \frac{ab}{a+b}$ ,  $\hat{V}(t_{xp}) = \frac{cd}{c+d}$  and

$$\stackrel{\wedge}{Cov}$$
 (t<sub>yp</sub>, t<sub>xp</sub>)= ac  $\stackrel{\wedge}{Cov}$  (t<sub>yc</sub>, t<sub>xc</sub>)+bd  $\stackrel{\wedge}{Cov}$  (t<sub>ys</sub>, t<sub>xs</sub>).

$$\hat{Cov}$$
 (t<sub>yc</sub>, t<sub>xc</sub>) =  $\sum_{l} (t_{yc1} - t_{yc2})(t_{xc1} - t_{xc2})/4$  based on sub-sample 1 & 2 estimates.

Similarly, 
$$\hat{Cov}$$
 (t<sub>ys</sub>, t<sub>xs</sub>)=  $\sum_{l} (t_{ys1} - t_{ys2})(t_{xs1} - t_{xs2})/4$ 

where  $\sum_{i}$  stands for summing over stratum x sub-stratum level covariance at the domain of pooling.

**2.7.4** Method laid down in para 2.3.1 and 2.3.2 requires calculation of estimate of variance of the estimates before pooling them. Reliability of estimate of variance should be ascertained with due consideration of sample size. Besides the complex calculations of variances and covariances for each cell of the table, one needs to address the issue of non-additivity of the component estimates with the estimate of marginal total. For e.g. pooled estimate of MPCE of FOOD and NON-FOOD may not add up to MPCE of TOTAL. To obviate this problem one may generate the pooled estimates of components first and then derive the estimate of total as sum of estimates of components.

# 2.7.5 Pooling by simple average of the estimates

- **2.7.5.1** Many of the States are not fully equipped with complex calculation of estimate of variance especially when cells of the table contains ratio of two characteristics which is usually presented in the NSS reports. When the State's participation is equal matching of central samples, the simple average of two estimates may be a way of combining the estimates considering central and state samples as independent samples. The pooled estimate will always lie between the estimates based on central and state sample separately.
- **2.7.5.2** When the State's participation is of unequal matching of central samples, the weighted average of two estimates with weights being matching ratio of central and state sample may be a better way of combining the estimates considering central and state samples as independent samples. For any characteristic, consider the state sample [s] in the form of two independent subsample s1 and s2 and the central sample[c] in the form of two independent subsample c1 and c2. Let matching ratio of state and central sample be m: n. Based on this, the respective estimates for state and central can be computed as:

$$t_s = \sum_l (t_{s1} + t_{s2})/2$$
 and  $t_{c} = \sum_l (t_{c1} + t_{c2})/2$ 

Pooled estimate of these two estimates is given by weighing with matching participation rate m:n. Thus the pooled estimate is given by:

$$t_p = \frac{mt_s + nt_c}{m+n} \text{ with } V(t_p) = \frac{m^2V(t_s) + n^2V(t_c)}{(m+n)^2}$$

In general 
$$V(t_c)$$
 and  $V(t_s)$  can be estimated as  $V(t_c) = \sum_l (t_{c1} - t_{c2})^2 / 4$ ,

$$\hat{V}(t_s) = \sum_{l} (t_{s1} - t_{s2})^2 / 4 \text{ and thus } \hat{V}(t_p) = \frac{m^2 \hat{V}(t_s) + n^2 \hat{V}(t_c)}{(m+n)^2}$$

The pooled estimate will always lie between the estimates based on central and state sample separately.

**Summing up**: For characteristics such as MPCE(URP, MRP and MMRP) for food, Non-food and Total parametric Z-test and Non-parametric run test were used. In case of Worker Participation Rate and Labour force Participation Rate(PS+SS, CWS and CDS) parametric Z-test and Non-parametric chi-square test were used for testing poolability.

# 2.8 Sample size of Telangana

Total sample size of Telangana State for central and state sample is given below:

TELANGANA STATE – RURAL									
	Central sample State sample								
Schedule	FSU surveyed	HH surveyed	Persons surveyed	FSU surveyed	HH surveyed	Persons surveyed			
1.0 Type-I	188	1504	5951	374	2992	12589			
1.0 Type-II	188	1503	5871	374	2992	12697			
10	188	1504	5834	374	2992	12404			
		TELANGA	NA STATE -	- URBAN					
	Ce	entral samp	le		State sample				
Schedule	FSU surveyed	HH surveyed	Persons surveyed	FSU surveyed	HH surveyed	Persons surveyed			
1.0 Type-I	176	1408	5361	350	2800	11002			
1.0 Type-II	176	1408	5339	350	2800	11115			
10	176	1408	5403	350	2800	10964			

# **Chapter 3**

# **Household Consumer Expenditure**

#### 3.1 Introduction

The NSS consumer expenditure survey aims at generating estimates of average household monthly per capita consumer expenditure (MPCE), the distribution of households and persons over the MPCE range, and the break-up of average MPCE by commodity group, separately for the rural and urban sectors of the country, for States and Union Territories, and for different socio-economic groups. These indicators are amongst the most important measures of the level of living of the relevant domains of the population. The distribution of MPCE highlights the differences in level of living of the different segments of the population and is an effective tool to study the prevalence of poverty and inequality. These estimates thus enable the apex planning and decision-making process to allocate the nation's resources among sectors, regions, and socio-economic groups, and assess the "inclusiveness" of economic growth.

Besides measurement of the level and the pattern of household consumption, another important use of the CES is to provide the budget shares of different commodity groups for the rural and urban population, which are used to prepare the weighing diagram for official consumer price indices (CPIs).

Apart from these major uses of the CES, the food (quantity) consumption data are used to study the level of intake of different nutritients for populations of different regions and disparities therein. Further, the estimated budget shares of a commodity at different MPCE levels facilitates the study of consumption elasticity or responsiveness of demand for the commodity to change in purchasing power.

# 3.2 Features of the survey: schedules of enquiry

The household consumer expenditure schedule ("Schedule 1.0") used for the survey to collect the information on quantity and value of household consumption, including 142 items of food, 15 items of energy (fuel, light and household appliances), 28 items of clothing, bedding and footwear, 19 items of educational and medical expenses, 51 items of durable goods, and 89 other items. The schedule also collected some other particulars of each household member, such as age, sex and educational level.

The schedules of enquiry used were of two types. The two types had the same item break-up but differed in reference periods used for collection of consumption data. Schedule Type 1 used to collect the information on consumption during the last 30 days and the last 365 days for certain categories of relatively infrequently purchased items, including clothing and consumer durables. For other categories, including all food and fuel and consumer services, it used a 30-days reference period. Schedule Type 2 used 'last 365 days' (only) for the infrequently purchased categories, 'last 7 days' for some categories of food items, as well as pan, tobacco and intoxicants, and 'last 30 days' for other food items, fuel and the rest.

# Reference periods used for collection of consumption data in Schedule 1.0, Type 1 and Type 2

Catagory	Itam Craun	Reference period for			
Category	Item Group	Schedule Type I	Schedule Type II		
I	Clothing, bedding, footwear, education, medical (institutional), durable goods	'Last 30 days' and 'Last 365 days'	Last 365 days		
II	Edible oil; egg, fish & meat; vegetables, fruits, spices, beverages and processed foods; pan, tobacco & intoxicants	Last 30 days	Last 7 days		
III	All other food, fuel and light, miscellaneous goods and services including noninstitutional medical; rents and taxes	Last 30 days	Last 30 days		

# 3.3 Features of the survey: scope and coverage

**3.3.1 Geographical coverage:** The survey covered the whole of the Indian Union except (i) interior villages of Nagaland situated beyond five kilometres of a bus route and (ii) villages in Andaman and Nicobar Islands which remain inaccessible throughout the year.

#### **3.3.2 Population coverage:** The following principles were adhered to:

- 1. Floating population, i.e., persons without any normal residence, was excluded. But persons residing in open space, roadside shelter, under a bridge, etc., more or less regularly in the same place were covered.
- Foreign nationals were excluded, as well as their domestic servants, if by definition the latter belonged to the foreign national's household (see Chapter Two, paragraph for definition of household). A foreign national who had become an Indian citizen for all practical purposes was, however, covered.
- 3. Persons residing in barracks of military and paramilitary forces (like police, BSF etc.) were kept outside the survey coverage. However, the civilian population residing in their neighborhood, including the family quarters of service personnel, was covered.
- 4. Orphanages, rescue homes, ashrams and vagrant houses were outside the survey coverage. However, the persons staying in old age homes, the students staying in ashram/hostels and the residential staff (other than monks/nuns) of these ashrams were covered. Although orphans living in orphanages were excluded, the persons looking after them and staying there were covered.

# 3.3.3 Sample size

**3.3.3.1 First-stage units:** As is usual in the regular NSS rounds, a "State sample" was surveyed by field functionaries of DE&S, Telangana State in addition to the "Central sample" surveyed by NSSO. For rural, the number of villages surveyed in the Central sample was 188 and the number of urban blocks surveyed was 176.

For State sample, 374 villages were surveyed in rural and 350 blocks were surveyed in urban. This document is based on the estimates obtained from pooling Central and state sample data.

**3.3.3.2 Second-stage units:** For the consumer expenditure survey, from each sample village and urban block, two samples of 8 households each were selected for canvassing Schedule Type 1 and Schedule Type 2. The total number of households in which Schedule 1.0 was canvassed for central and state sample are as given below.

Table 3.1: Number of villages/blocks surveyed and number of households surveyed for schedule 1.0 Type 1 and Type 2: NSS 68th round

# **Central sample:**

SI.	District	No. of FSUs (villages/ blocks) surveyed		Number of sample households						
No.	Name	Rural	Urban	Sched	lule - Ty	pe 1	Sched	Schedule - Type 2		
		Kurai	Orban	Rural	Urban	Total	Rural	Urban	Total	
1	2	3	4	5	6	7	8	9	10	
1	Adilabad	16	12	128	96	224	128	96	224	
2	Nizamabad	16	8	128	64	192	128	64	192	
3	Karimnagar	24	12	192	96	288	192	96	288	
4	Medak	20	8	160	64	224	160	64	224	
5	Hyderabad	0	64		512	512		512	512	
6	Rangareddy	16	36	128	288	416	128	288	416	
7	Mahabubnagar	28	8	224	64	288	223	64	287	
8	Nalgonda	24	8	192	64	256	192	64	256	
9	Warangal	24	12	192	96	288	192	96	288	
10	Khammam	20	8	160	64	224	160	64	224	
	Total	188	176	1504	1408	2912	1503	1408	2911	

#### State sample:

SI.	District Name	No. of FSUs (villages/block s) surveyed		Number of sample households						
No.	District Name			Sched	dule - Ty	pe 1	Sched	Schedule - Type 2		
		Rural	Urban	Rural	Urban	Total	Rural	Urban	Total	
1	2	3	4	5	6	7	8	9	10	
1	Adilabad	31	24	248	192	440	248	192	440	
2	Nizamabad	32	16	256	128	384	256	128	384	
3	Karimnagar	47	23	376	184	560	376	184	560	
4	Medak	40	16	320	128	448	320	128	448	
5	Hyderabad	0	127		1016	1016		1016	1016	
6	Rangareddy	32	72	256	576	832	256	576	832	
7	Mahabubnagar	56	16	448	128	576	448	128	576	
8	Nalgonda	48	16	384	128	512	384	128	512	
9	Warangal	48	24	384	192	576	384	192	576	
10	Khammam	40	16	320	128	448	320	128	448	
	Total	374	350	2992	2800	5792	2992	2800	5792	

# 3.4 Parameters considered for pooling

The following broad parameters were considered for pooling of central and state sample data of NSS keeping in view the limitation of sample size at district level and the nature of indicators.

- 1 Household size, sex, age
- 2 MPCE of Food, Non-Food and Total MPCE derived from detail item from URP, MRP and MMRP

# 3.5 Testing poolability of central and state sample

**3.5.1** The central sample and state sample are drawn independently following identical sampling design with same concepts, definitions and instructions to collect the state sample data. But due to lack of adequate training of field and processing staff of State DES, unit level data in some cases are not properly validated. There is also expected agency bias in the two sets of data generated by different agencies. As such they cannot be merged for generating pooled estimate without testing that the samples are realized from identical distribution function.

The Non-parametric test for poolability (Wald-Wolfowitz Run test), Parametric test for poolability (Z-test) and Divergence between the estimates of central and state samples have been performed to test whether the samples are coming from identical distribution function or not.

The summary findings of the poolability test over MPCE are as follows

**3.5.1.1** The Z-statistic by run test is given in the statement it shows that at 1% critical error, one out of 9 districts in rural and urban areas of Telangana rejected the null hypothesis of run test in URP. In the rural sector the rejection was one district each in URP, MRP and in MMRP whereas in Urban sector one district in both URP and MMRP and none district in MRP were rejected. Similarly the rejection of null hypothesis for the mean test in rural sector reveals 3 districts in case of URP, 2 districts in MRP and 1 district of MMRP and in the urban sector one district each in URP and MRP and 4 districts in MMRP, the null hypothesis was rejected.

Table 3.2: Number of Districts for which Poolability was rejected over MPCE by run test using Z-Statistic (one sided) and Mean test

		Rural	Urban			
Туре	Total Districts			No. of Districts rejected		
(1)	(2)	(3)	(4)	(5)		
	Run test	using <b>Z</b> -statistic	(one sided)			
URP	9	1	10	1		
MRP	9	1	10	-		
MMRP	9	1	10	1		
		Mean test				
URP	9	3	10	1		
MRP	9	2	10	1		
MMRP	9	1	10	4		

**3.5.1.2** Divergence between the estimates of central and state sample: Before pooling the two sets of sample at a particular domain and classification, one needs to examine the divergence of the estimates derived for the domain. For this exercise, District is considered as domain of pooling and the divergence is worked out as absolute percentage difference between central and state sample estimates. Therefore, it is examined the distribution of districts by absolute percentage range of divergence of MPCE (food, nonfood and total) of central and state sample in the state for rural as well as urban sector. The districts with more than 20 per cent divergence in total MPCE in which 1 district each in food and non-food group in the rural sector and 1 district in food group and 3 districts in non-food group out of 10 districts in urban sector have more than 20 percent divergence.

Table 3.3: Distribution of Districts by range of percentage divergence of MPCE of central and State sample estimates over MPCE (MRP)

Item	Sector	<=5%	5-10%	10- 15%	15- 20%	20- 25%	25- 30%	>30%	Total Dists.
MPCE: Food Group		4	2	1	1	1		-	9
MPCE: Non Food Group	Rural	3	5	ı	ı	ı	1	ı	9
MPCE: Total		6	1	-	2	-	-	-	9
MPCE: Food Group		2	4	1	2	1	-	-	10
MPCE: Non Food Group	Urban	1	2	4	-	3	-	-	10
MPCE: Total		2	4	2	2	-	-		10

# 3.5.2 Relative Standard Error (RSE) of MPCE

The Standard Error measure indicates the extent to which a survey estimate is likely to deviate from the true population and is expressed as a number. The Relative Standard Error (RSE) is the standard error expressed as a fraction of the estimate and is usually displayed as a percentage. Estimates with a RSE of 30% or greater are subject to high sampling error. The lower Relative Standard Error (RSE), the data will have more precision measurement since it has proportionately less sampling variation around the mean. The Distribution of districts by range of RSE of MPCE (MRP) of Central and State sample of Telangana for both Rural and Urban are presented in the following table

Table 3.4: Distribution of districts by range of RSE of MPCE (MRP) of Central and State sample of Telangana- Rural

Item	<=5%	5-10%	10- 15%	15- 20%	20- 25%	25- 30%	>30%	Total Dists.	
central sample									
MPCE: Food Group	6	3	ı	ı	-	-	-	9	
MPCE: Non Food Group	6	1	1	-	1	-	-	9	
MPCE: Total	7	1	-	1	-	-	-	9	
Item	<=5%	5-10%	10- 15%	15- 20%	20- 25%	25- 30%	>30%	Total Dists.	
	state sample								
MPCE: Food Group	8	1	-	-	-	-	-	9	
MPCE: Non Food Group	2	5	1	-	1	-	-	9	
MPCE: Total	5	2	1	1	-	-	-	9	
Item	<=5%	5-10%	10- 15%	15- 20%	20- 25%	25- 30%	>30%	Total Dists.	
	Poole	ed sample	e (altern	ative me	thod)				
MPCE: Food Group	9	-	-	-	-	-	-	9	
MPCE: Non Food Group	6	2	ı	1	-	-	-	9	
MPCE: Total	8	-	1	-	-	-	-	9	

The distribution of districts by range of RSE of MPCE of central, state and pooled sample estimates of rural Telangana is presented in the statement. The RSE estimate of MPCE on food was within 10 percent for all the districts both in central and state sample. In case of non food 8 districts RSE estimate was within 15 per cent and one district within 20-25 percent for both central and state sample. From the distribution of districts by RSE level, it can be seen that the pooled estimates of MPCE on food of all the districts was within 5 percent range of RSE and for non-food 8 districts were within 10 percent and only one district was within 15-20 percent.

Table 3.5: Distribution of districts by range of RSE of MPCE (MRP) of Central and State sample of Telangana- Urban

Item	<=5%	5-10%	10-15%	15-20%	20-25%	25-30%	>30%	Total Dists.		
central sample										
MPCE: Food Group	7	3	-	-	-	-	-	10		
MPCE: Non Food Group	2	5	2	1	-	-	-	10		
MPCE: Total	5	4	-	1	-	-	-	10		
Item	<=5%	5-10%	10-15%	15-20%	20-25%	25-30%	>30%	Total Dists.		
			state sam	ple						
MPCE: Food Group	8	1	1	-	-	-	-	10		
MPCE: Non Food Group	4	3	1	1	1	-	-	10		
MPCE: Total	6	2	1	1	-	-	-	10		
Item	<=5%	5-10%	10-15%	15-20%	20-25%	25-30%	>30%	Total Dists.		
	P	ooled sam	nple (alteri	native met	thod)					
MPCE: Food Group	9	1	-	-	-	-	-	10		
MPCE: Non Food Group	8	2	-	-	-	-	1	10		
MPCE: Total	8	2	-	-	-	-	-	10		

The above statement provides the distribution of districts by RSE of central and State sample estimates of MPCE in urban Telangana. From the above table, it is observed all the districts in the food group were within 10 percent range of RSE in the central sample and in the state sample 9 districts were within 10 percent RSE and one district within 10-15 percent. In case of non-food group 9 districts in the central and 8 districts in the state sample were within 15 percent and one district in central and 2 districts in state sample were above 15 percent range of RSE. In the pooled sample all the districts in food and non-food groups were within 10 percent range of RSE estimates.

## 3.6 Estimates of MPCE

There are several methods for pooling of central and state sample data of NSS and are as given below

3.6.1 The simple average of two estimates may be one way of combining the estimates considering central and state samples as independent samples when the State's participation is equal matching of central samples. The pooled estimates always lie between the estimates based on central and state sample separately.

When the State's participation is equal matching of central samples, the weighted average of two estimates with weights being matching ratio of central and state sample may be the better way of combining the estimates considering central and state samples as independent samples.

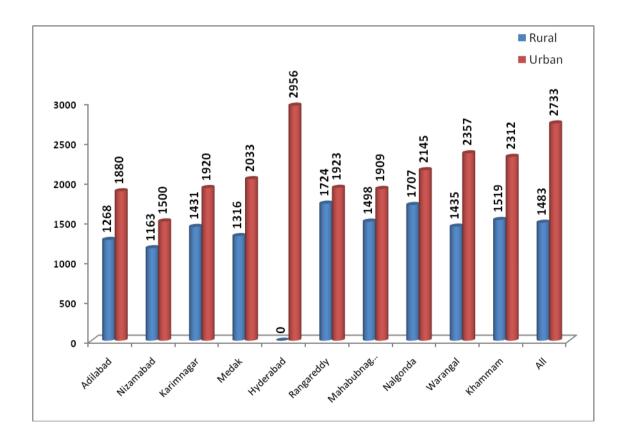
- 3.6.2 Second method may be to weight in inverse proportion to estimated variances of the two estimates i.e., Pooling by inverse weight of the variation of the estimates
- 3.6.3 Third method of pooling is to merge the two data sets and recalculate the multiplier for the combined data and generate the estimates as per combined sample instead of subsamples.
- 3.6.4 Fourth method of pooling is to merge the two data sets, recalculate the multiplier for the pooled data sub sample wise considering sub sample-1 of central and state sample as  $1^{st}$  sub sample and subsample-2 of central and state sample as  $2^{nd}$  sub sample and generate the estimates based on simple average of two sub sample estimates as per redefined sub sample.
- 3.6.5 The next method of pooling is to simple average of four independent sub samples as pooled estimate in the case of states participating in equal matching cases as per Mahalanobis Inter penetrating subsample (IPS) method which would result the pooled estimate lie between central and state sample.
- 3.6.6 After several deliberations in the meetings of the National Statistical Commission (NSC) committee on pooling of central and State sample data of NSS, the committee opined that among the alternatives, either of the pooling method prescribed in para 3.6.1 , 3.6.2 and 3.6.5 may be used depending upon IT capability available with the states so that pooled estimates lies between central and state sample estimates.
- 3.6.7 According to the methodology suggested by the National Statistical Commission (NSC) committee on pooling of central and State sample data of NSS, the poolability tests have been conducted to test that the samples are coming from identical distribution function and the pooled estimates are generated based on **inverse weight** of the variance of the estimates.
- 3.6.8 **Uniform Reference Period MPCE** (or **MPCEURP**): The MPCEURP is measured based on household consumer expenditure on each item of schedule Type 1 for the reference period of "last 30 days" (preceding the date of survey).
- 3.6.9 **Mixed Reference Period MPCE** (or **MPCEMRP**): The MPCEMRP is measured based on household consumer expenditure on items of clothing and bedding, footwear, education, institutional medical care, and durable goods recorded in Schedule Type 1 for the reference period of "last 365 days", and expenditure on all other items is recorded with a reference period of "last 30 days".
- 3.6.10 **Modified Mixed Reference Period MPCE** (or **MPCEMMRP**): The MPCEMMRP is measured based on household consumer expenditure on edible oil, egg, fish and meat, vegetables, fruits, spices, beverages, refreshments, processed food, pan, tobacco and intoxicants is recorded for a reference period of "last 7 days", and for all other items, the reference periods used are the same as in case of Mixed Reference Period MPCE (MPCEMRP).

The district wise pooled estimates of MPCE (URP, MRP and MMRP) are presented in the Table

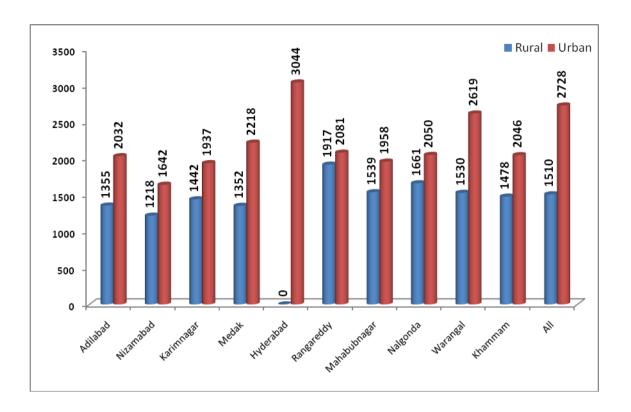
Table 3.6: District wise pooled estimate of MPCE (URP, MRP, MMRP) for Rural and Urban in Telangana – 68<sup>th</sup> Round (2011-12)

SI.	Dist name	MPCE (	(URP)	MPCE (	(MRP)	MPCE (MMRP)		
No.	Dist name	Rural	Urban	Rural	Urban	Rural	Urban	
1	Adilabad	1267.73	1879.67	1354.87	2032.26	1351.91	2035.26	
2	Nizamabad	1163.09	1500.21	1217.57	1641.58	1307.12	1685.85	
3	Karimnagar	1431.37	1920.38	1441.53	1937.29	1454.45	2168.96	
4	Medak	1316.05	2032.66	1351.61	2218.18	1542.46	2046.21	
5	Hyderabad	-	2956.23	-	3043.92	-	2918.68	
6	Rangareddy	1723.68	1923.10	1916.56	2081.14	1842.12	2129.28	
7	Mahabubnagar	1497.76	1908.59	1538.58	1958.40	1585.55	1954.46	
8	Nalgonda	1706.71	2145.19	1660.89	2050.08	1716.51	1936.25	
9	Warangal	1434.77	2357.08	1530.09	2618.83	1665.35	2669.32	
10	Khammam	1518.90	2312.28	1477.75	2046.22	1738.24	2121.02	
	All	1483.37	2732.55	1509.83	2727.85	1591.30	2718.66	

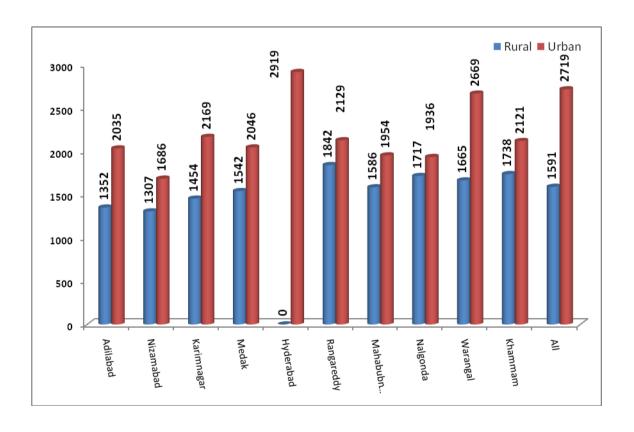
**Graph 4.1:** Monthly Percapita Consumption Expenditure (MPCE – URP) – (in Rs.)



**Graph 4.2:** Monthly Percapita Consumption Expenditure (MPCE – MRP) – (in Rs.)



**Graph 4.3:** Monthly Percapita Consumption Expenditure (MPCE – MMRP) – (in Rs.)



# 3.7 Expenditure pattern on Food and Non-food

The per capita expenditure of MPCEMMRP on food and non-food in rural and urban areas of Telangana are presented in the following table.

Table 3.7: District wise MPCE (MMRP) on Food and Non-food in Rural Areas of Telangana State : 68<sup>th</sup> Round (2011-12)

	Areas of Telangana State: 00 Round (2011-12)						
SI. No.	District Name	Food	% to Total	Non-Food	% to Total	Total	
1	2	3	4	5	6	7	
1	Adilabad	718.44	53	633.47	47	1351.91	
2	Nizamabad	645.58	49	661.54	51	1307.12	
3	Karimnagar	695.98	48	758.47	52	1454.45	
4	Medak	747.59	48	794.87	52	1542.46	
5	Hyderabad	-	-	-	-	-	
6	Rangareddy	833.70	45	1008.42	55	1842.12	
7	Mahabubnagar	902.56	57	682.99	43	1585.55	
8	Nalgonda	817.36	48	899.15	52	1716.51	
9	Warangal	904.07	54	761.28	46	1665.35	
10	Khammam	936.14	54	802.10	46	1738.24	
	All	788.10	49	803.20	51	1591.30	

The per capita expenditure of MPCEMMRP on food items is Rs.788.10 (49%) and on non-food items is RS.803.20 (51%) in rural areas. The expenditure on food items in Adilabad, Nizamabad, Karimnagar and Medak districts is below the State average (Rs.788.10). Under the Non-food category, the expenditure in all the districts (except Rangareddy and Nalgonda districts) is below the State average (Rs.803.20)

Table 3.8: District wise MPCE (MMRP) on Food and Non-food in Urban Areas of Telangana State : 68<sup>th</sup> Round (2011-12)

SI. No.	District Name	Food	% to Total	Non-Food	% to Total	Total
1	2	3	4	5	6	7
1	Adilabad	824.89	41	1210.37	59	2035.26
2	Nizamabad	778.43	46	907.42	54	1685.85
3	Karimnagar	869.34	40	1299.62	60	2168.96
4	Medak	870.55	43	1175.66	57	2046.21
5	Hyderabad	1196.78	41	1721.90	59	2918.68
6	Rangareddy	955.97	45	1173.31	55	2129.28
7	Mahabubnagar	1007.81	52	946.65	48	1954.46
8	Nalgonda	893.58	46	1039.67	54	1936.25
9	Warangal	1024.98	38	1644.34	62	2669.32
10	Khammam	976.33	46	1144.69	54	2121.02
	All	1113.50	41	1605.16	59	2718.66

The per capita expenditure of MPCEMMRP on food items is Rs.1113.50 (41%) and on non-food items is Rs.1605.16 (59%) in urban areas. The expenditure on food items in all the districts (except Hyderabad Rs.1196.78) is below the State average (Rs.1113.50). Under the Non-food category, the expenditure in all the districts (except Hyderabad Rs.1721.90 and Warangal Rs.1644.34 districts) is below the State average (Rs.1605.16).

# **Chapter 4**

# **Employment and Unemployment**

#### 4.1 Introduction

The activity participation of the people is not only dynamic but also multidimensional; it varies with region, age, education, gender, industry and occupational category.

The basic objective of the employment-unemployment surveys s to get estimates of the employment & unemployment characteristics at National and State level. The Statistical indicators on labour market are required for planning, policy and decision making at various levels, both within the Government and outside. Some of the important uses of these indicators include use by the Planning Commission in evolving employment Strategy, use by National Account Division in estimating gross domestic product and sector wise workforce participation, use by various researchers to analyse the condition of the labour market.

# 4.2 Parameters considered for Pooling

The following broad categories were considered as parameters for pooling of central and state sample data of NSS 68<sup>th</sup> round.

- ❖ Labour Force Participation Rate (LFPR) for rural and urban sectors of Usual Principal Status and Subsidiary Status
- Worker Population Ratio (WPR) for rural and urban of Usual Principal Status and Subsidiary Status
- Unemployment Rate (UR)

## 4.3 Chi-Square Test and z test for Poolability

A chi-square test used for equality of two proportions is exactly the same thing as a z-test. Before generating estimates on activity status, the distribution of person over worker, unemployed and out of labour force in the two samples is tested with Chi-Square test.

Table 4.1: Number of Districts for which Poolability was rejected over LFPR by Chi-Square test and z test.

	No. of Districts rejected					
Туре	Rural Urban		Total Districts			
(1)	(3)	(4)				
	Chi-Sq	uare test				
PS+SS	4	1	10			
CWS	3	1	10			
CDS	3	2	10			
	Z	-test				
PS+SS	3	1	10			
CWS	3	1	10			
CDS	4	2	10			

The above statement provides rejection of poolability of total labour force at district level at 1% critical error of Chi-square test and at 5% critical error of z-test of the districts for rural and urban in PS+SS, CWS and CDS.

The district wise results of Chi-square test at 1% of critical error the values to be accepted for below 9.21 and if the value exceeds, the districts were rejected for rural and urban in PS+SS, CWS and CDS. Accordingly, the district wise results of z-test at 5% of critical error the values to be accepted for below 2.575 and if the value exceeds, the districts were rejected for rural and urban in PS+SS, CWS and CDS.

Both the results can be observed in the comprehensive tables provided at the end of the report.

# 4.4 Estimates of Activity Status

The "inverse weight of the variance of the estimate" method is adopted for estimating parameters of activity status, as the sample size is not same of the two sets. Key findings of employment and unemployment estimates at district level are based on pooled data and have been discussed as follows.

# 4.5 Labour Force Participation Rate (LFPR)

A measure of the active portion of an economy is labour force. The participation rate refers to the number of people who are either employed or are actively looking for work. The number of people who are no longer actively searching for work would not be included in the participation rate.

The participation rate is important in analyzing the unemployment rate. According to the activity status group the pooled estimates generated for three different approaches viz. usual status (PS+SS) with a reference period of one year (365 days) preceding to the date of survey, current weekly status (CWS) with a one week reference period preceding to the date of survey and current day status (CDS) based on the daily activity pursued during each day of the reference week.

Table 4.2: DISTRICT WISE – LFPR PER 1000 PERSONS PS+SS, CWS AND CDS IN RURAL AND URBAN AREAS OF TELANGANA

SI.	District	PS+	SS	CV	VS	CDS	
No.	District	R	U	R	U	R	U
1	Adilabad	540	360	574	358	607	352
2	Nizamabad	611	413	606	425	594	424
3	Karimnagar	585	406	565	402	555	428
4	Medak	495	392	485	392	492	382
5	Hyderabad	-	364	ı	363	-	363
6	Rangareddy	426	328	417	321	416	318
7	Mahabubnagar	552	335	553	335	533	334
8	Nalgonda	561	389	551	441	548	441
9	Warangal	517	370	514	359	468	348
10	Khammam	477	338	472	344	466	344
	Telangana	525	358	513	358	506	358

It is observed from the above table that Rural LFPR is higher than Urban at both the district and State level. Among the districts of Rural Telangana highest LFPR (PS+SS) estimated in Nizamabad (611) followed by Karimnagar (585), Nalgonda (561), Mahabubnagar (552), Adilabad (540) and Warangal (517). Where as in urban areas Highest LFPR (PS+SS) is estimated in Nizamabad (413) followed by Karimnagar (406), same as in rural Telangana, further in Medak (392), Nalgonda (389), Warangal (370) and Hyderabad (364).

The basis of PS+SS calculation, the volume of unemployment shown in always under-estimated since it excludes a large number who are significantly under-employed or unemployed over a major part of the referred period. Therefore, it was decided to switch over to the CDS. The current Daily Status (CDS), which is conveniently one of the other options provided by the National Sample Survey Office for measurement of employment and unemployment.

Most of the countries across the globe use the concept close to weekly status, which is again closer to that of CDS. Within India almost all other reports from alternate sources agree that the CDS concept of unemployment is the most realistic for projecting labour force and employment generation.

# 4.6 Divergence between the estimates of Central and State Sample (LFPR)

The absolute percentage difference between central and state sample (divergence) is worked out considering district as a domain for pooled estimates. The divergence in LFPR between the two estimates is noticed to be less than 10% in majority (7 out of 10) of the districts in urban and in rural 4 out of 9 are below 10%, 10-15% there are 2 districts and 15-20% there is only one district.

Table 4.3: Distribution of Districts according to divergence level (LFPR)

Level	Rural	Urban
<=5%	3	4
5-10%	1	3
10-15%	3	2
15-20%	1	1
20-25%	-	-
25-30%	-	-
>30%	1	-
Total	9	10

## 4.7 RSE of Estimates (LFPR)

Table 4.4: Distribution of Districts according to RSE level (LFPR)

Level		Rural		Urban				
Levei	Central	State	Pooled	Central	State	Pooled		
<=5%	7	6	8	4	6	8		
5-10%	2	3	1	2	3	2		
10-15%	-	-	-	1	-	-		
15-20%	-	-	-	3	-	-		
20-25%	-	-	-	-	1	-		
25-30%	-	-	-	-	-	-		
>30%	-	-	-	-	-	-		
Total	9	9	9	10	10	10		

From the above table distribution of district by RSE level, the pooled estimates of LFPR has relatively lower when compared to central samples estimates in the urban sector while more or less same in the rural sector. But in both the sectors pooled RSE is within 5% range in (8) districts out of (9) districts in rural sector and out of (10) districts in urban sector. It reveals that LFPR at district level has improved by pooling central and state samples. Thus we can conclude that precession of estimate of LFPR increased by pooling.

# 4.8 Worker Population Ratio (WPR)

Worker Population Ratio (WPR) is the ratio of population of a country that is contributing to the production of goods and services. WPR provides estimation of employment situation of that country. This is also useful in knowing the proportion of population that is actively contributing to the production of goods and services in the economy.

According to the activity status group the pooled estimates generated for three different approaches viz. usual status (PS+SS) with a reference period of one year (365 days) preceding to the date of survey, current weekly status (CWS) with a one week reference period preceding to the date of survey and current day status (CDS) based on the daily activity pursued during each day of the reference week.

# 4.9 Gender disparity in WPR

In the late 1940s, the employment- population ratio was in the mid-50 percent range in All India. By the late 1990s this rate had gradually risen to the mid-60 percent range. Much of this increase can be attributed to the increased participation of women in the labour force, which resulted from a change in the traditional role of women as housewives, stay-at-home mothers, and homemakers.

Gender gap in estimate of labour force at State and district level is discussed in this section.

Table 4.5: DISTRICT WISE POOLED WORKING GENDER PER 1000 (WPR)
PERSONS IN RURAL AND URBAN AREAS OF TELANGANA

DIST		RURAL		URBAN			
D131	Male	Female	Persons	Male	Female	Persons	
Adilabad	590	361	528	544	127	350	
Nizamabad	569	579	611	514	235	416	
Karimnagar	641	470	577	586	227	402	
Medak	582	407	472	577	208	386	
Hyderabad	-	-	-	548	124	351	
Rangareddy	560	263	421	491	129	325	
Mahabubnagar	563	493	549	486	134	333	
Nalgonda	532	464	561	555	221	372	
Warangal	570	459	515	505	197	362	
Khammam	603	357	456	492	138	318	
Telangana	599	429	519	539	154	350	

The above table is related to Pooled WPR in PS+SS, where any person worked at least one month in the reference period of one year. A person may be worked in two jobs for both usual status and in subsidiary status also counted.

Subsequently, Rural WPR is higher than Urban at both the district and State level. Among the districts of Telangana highest WPR (PS+SS) in female is observed in Nizamabad district (579) displaying the gender disparity being dominated by female WPR (PS+SS) and highest WPR (PS+SS) is recorded in Rural Karimnagar district (M: 641). However next to Karimnagar district is in Khammam (M: 603) followed by Adilabad (M: 590) and Medak (M: 582) in the rural sector. In urban sector Karimnagar (M: 586) has highest WPR followed by Medak (M: 577) and Nalgonda (M: 555). It is also observed that the employment participation rate is very low in Urban areas of female members within the district as well as state when compared to Rural areas.

**Workforce Participation Rate** 70% 59.90% 60% 53.90% 50% 42.90% 40% 30% 20% <del>15.40%</del> 10% 0% М FΜ м FΜ

Graph 4.4: WPR FOR MALE AND FEMALE PERSONS IN RURAL AND URBAN AREAS

The above graph depicts that still there is a huge gap in female participation in urban areas.

URBAN

# 4.10 Divergence between estimates of Central and State Sample (WPR)

RURAL

Divergence of districts by absolute percentage of difference of WPR between central and state samples according to PS+SS is shown in the Table 4.6.

Table 4.6: Distribution of Districts according to divergence level (WPR)

Level	Rural	Urban
<=5%	3	3
5-10%	1	3
10-15%	3	3
15-20%	-	1
20-25%	1	-
25-30%	1	-
>30%	-	-
Total	9	10

It is observed that most of the districts are within 15% of divergence both in rural (7) and urban (9) areas. Only one district in urban sector is within 15-20% and (2) districts in rural sector are with in 20-30%.

# 1.11 RSE of Estimates (WPR)

Table 4.7: Distribution of Districts according to RSE level (WPR)

Level		Rural		Urban			
Level	Central	State	Pooled	Central	State	Pooled	
<=5%	6	6	9	5	6	8	
5-10%	3	3	-	2	3	2	
10-15%	-	-	-	-	1	-	
15-20%	-	-	-	3	-	-	
20-25%	-	-	-	-	-	-	
25-30%	-	-	-	-	-	-	
>30%	-	-	-	-	-	-	
TOTAL	9	9	9	10	10	10	

Distribution of districts by range of relatively standard error (RSE) of WPR according to PS+SS status of central, state and pooled sample estimates of both rural and urban sectors will be seen in the above table.

It is very clear that in the rural sector both in central and state sample all the districts RSE Estimate is within 10% similarly 70 to 90 percent urban districts RSE estimate is with in the range of 10%.

By pooling central and state samples we can say that the precession of estimates of WPR has increased.

# 4.12 Unemployment Rate (UR)

Persons are considered unemployed, if he/she was not working, but was either seeking or was available for work for a relatively long time during the reference period.

Unemployment rate is defined as the number of persons unemployed per 1000 persons in the labour force. This in effect gives the unutilized portion of labour force.

According to the activity status group the pooled estimates generated for three different approaches viz. usual status (PS+SS) with a reference period of one year (365 days0 preceding to the date of survey. The second estimate is based on current weekly status (CWS) with a one week reference period proceeding to the date of survey which indicates both chronic unemployment and seasonal unemployment. The third estimated based on current day status (CDS) of the daily activity pursued during each day of the reference week.

Table 4.8: DISTRICT WISE UNEMPLOYMENT RATE PER 1000 DISTRIBUTION (PS+SS)

SI. No.	District	Unemployment Rate	
		Rural	Urban
1	Adilabad	20	28
2	Nizamabad	0	-7
3	Karimnagar	14	10
4	Medak	46	15
5	Hyderabad	-	36
6	Rangareddy	12	9
7	Mahabubnagar	5	6
8	Nalgonda	0	44
9	Warangal	4	22
10	Khammam	44	59
	Telangana	11	22

From the above table it is perceived that unemployment rate is higher in urban sector than in rural Sector of Telangana. Among the districts in rural sector, Medak (46) followed by Khammam (44) has highest Unemployment Rate (UR) where as in urban sector highest Unemployment Rate (UR) is in Khammam (59) followed by Nalgonda (44) and Hyderabad (36).

## **CHAPTER 5**

# **Pooled Results of Schedule 1.0 (Consumer Expenditure)**

State: TELANGANA Sector: RURAL [SCHEDULE 1.0 TYPE-I]

Table-S1.1(R): District wise estimated no. of households(00) and their RSEs for central, state and pooled sample

All	55482	54906	55098	0.33	0.45	0.32	1504	2992	4496
Khammam	6402	5775	5984	4.93	2.79	2.51	160	320	480
Warangal	7131	7076	7094	0.5	6.15	4.09	192	384	576
Nalgonda	7938	7882	7901	3.2	3.88	2.8	192	384	576
Mahabubnagar	6870	8106	7694	0.38	4.36	3.07	224	448	672
Rangareddy	4939	3852	4214	9.94	7.45	5.98	128	256	384
Hyderabad	-	-	-	-	-	-	-	-	-
Medak	5112	5400	5304	3.95	5.04	3.65	160	320	480
Karimnagar	8146	7199	7519	1	3.92	2.51	192	376	568
Nizamabad	4654	4915	4828	0.83	3.55	2.43	128	256	384
Adilabad	4289	4702	4561	4.89	0.44	1.6	128	248	376
2.50 Harris	central	state	pooled	central	state	pooled	central	state	pooled
Dist name		Estimateo Iseholds(			of Estimousehold		Samp	le house	eholds

# State: TELANGANA Sector: URBAN [SCHEDULE 1.0 TYPE-I]

Table-S1.1(U): District wise estimated no. of households(00) and their RSEs for central, state and pooled sample

Dist name		stimated seholds((			of Estim		Samp	le house	holds
DISCHAINE	central	state	pooled	central	state	pooled	central	state	pooled
Adilabad	1795	1435	1555	30.55	5.66	12.26	96	192	288
Nizamabad	1010	1334	1226	13.1	6.08	5.69	64	128	192
Karimnagar	2291	1463	1747	0.41	17.82	9.81	96	184	280
Medak	782	786	785	4.42	9.82	6.72	64	128	192
Hyderabad	25826	18612	21029	5.74	0.14	2.36	512	1016	1528
Rangareddy	607	412	477	12.56	6.83	6.62	288	576	864
Mahabubnagar	939	897	911	8.42	12.05	8.42	64	128	192
Nalgonda	1298	994	1095	9.53	19.82	12.57	64	128	192
Warangal	1963	1713	1796	2.22	13.74	8.77	96	192	288
Khammam	1734	1396	1508	6.42	0.21	2.46	64	128	192
All	38246	29039	32120	2.86	0.31	1.15	1408	2800	4208

## State: TELANGANA Sector: RURAL [SCHEDULE 1.0 TYPE-II] - MMRP

Table-S1.2(R): District wise estimated no. of households(00) and their RSEs for central, state and pooled sample

Dist name		stimated seholds((			of Estim		Samp	le house	holds
DISCHAINE	central	state	pooled	central	state	pooled	central	state	pooled
Adilabad	4289	4702	4561	4.89	0.44	1.60	128	248	376
Nizamabad	4654	4915	4828	0.83	3.55	2.43	128	256	384
Karimnagar	8146	7199	7519	1.00	3.92	2.51	192	376	568
Medak	5112	5400	5304	3.95	5.04	3.65	160	320	480
Hyderabad	-	ı	-	-	ı	-	-	-	-
Rangareddy	4939	3852	4214	9.94	7.45	5.98	128	256	384
Mahabubnagar	6870	8106	7694	0.38	4.36	3.07	223	448	671
Nalgonda	7938	7882	7901	3.20	3.88	2.80	192	384	576
Warangal	7131	7076	7094	0.50	6.15	4.09	192	384	576
Khammam	6402	5775	5984	4.93	2.79	2.51	160	320	480
All	55482	54906	55098	0.33	0.45	0.32	1503	2992	4495

# State: TELANGANA Sector: URBAN [SCHEDULE 1.0 TYPE-II] - MMRP

Table-S1.2(U): District wise estimated no. of households(00) and their RSEs for central, state and pooled sample

Dist name		stimated seholds((			of Estima ousehold		Samp	le house	holds
DISCHAINE	central	state	pooled	central	state	poole d	central	state	pooled
Adilabad	1795	1435	1555	30.55	5.66	12.26	96	192	288
Nizamabad	1010	1334	1226	13.10	6.08	5.69	64	128	192
Karimnagar	2291	1463	1747	0.41	17.82	9.81	96	184	280
Medak	782	786	785	4.42	9.82	6.72	64	128	192
Hyderabad	25826	18612	21029	5.74	0.14	2.36	512	1016	1528
Rangareddy	607	412	477	12.56	6.83	6.62	288	576	864
Mahabubnagar	939	897	911	8.42	12.05	8.42	64	128	192
Nalgonda	1298	994	1095	9.53	19.82	12.57	64	128	192
Warangal	1963	1713	1796	2.22	13.74	8.77	96	192	288
Khammam	1734	1396	1508	6.42	0.21	2.46	64	128	192
All	38246	29039	32120	2.86	0.31	1.15	1408	2800	4208

# State: TELANGANA Sector: RURAL [SCHEDULE 1.0 TYPE-I]

Table-S1.3(R): District wise estimated no. of persons(00), sex ratio and their RSEs for central, state and pooled sample

Dist name	Est	persons(	00)	RSE of	f Est pe	ersons	S	ex rat	io	RSE (	of Sex	ratio
	central	state	pooled	central	state	pooled	central	state	pooled	central	state	pooled
Adilabad	15325	18873	17665	5.96	0.94	1.88	950.6	908.8	927	5.31	10.37	6.99
Nizamabad	17368	20503	19458	4.41	2.57	2.23	865.1	1172	1077	16.07	8.29	7.45
Karimnagar	28108	26431	26998	1.04	3.86	2.53	1009	1031	1027	13.09	1.40	4.49
Medak	22529	24311	23717	12.28	4.47	4.95	920.9	996.9	974	1.82	3.94	2.76
Hyderabad	-	-	-	-	-	-	-	-	-	-	-	-
Rangareddy	18451	15973	16799	4.01	4.61	3.27	756.9	983.2	918	26.21	1.99	7.64
Mahabubnagar	27772	34661	32365	4.44	3.57	2.85	984.3	937.3	953.2	11.90	5.34	5.39
Nalgonda	25364	30157	28559	2.30	3.38	2.47	1076	927.5	977.9	4.54	0.95	1.77
Warangal	24095	25099	24764	1.84	9.92	6.73	896.1	1042	995.3	3.41	2.44	1.99
Khammam	23519	22773	23022	6.01	7.54	5.38	1156	917.9	998.2	2.86	2.74	2.01
All	202532	218780	213345	2.02	1.37	1.13	962.1	984	976.6	3.66	2.1	1.85

## State: TELANGANA Sector: URBAN [SCHEDULE 1.0 TYPE-I]

Table-S1.3(U): District wise estimated no. of persons(00), sex ratio and their RSEs for central, state and pooled sample

Dist name	Est	persons(	00)	RSE of	f Est pe	rsons	S	ex ratio	)	RSE	of Sex	ratio
	central	state	pooled	central	state	pooled	central	state	poole d	centr al	state	poole d
Adilabad	5597	5592	5594	9.61	6.88	5.59	943.6	1081	1034	3.08	0.36	0.97
Nizamabad	4505	5947	5466	10.87	7.39	6.13	890.1	1152	1071	3.51	5.96	4.41
Karimnagar	8725	5911	6876	8.71	22.12	13.06	1029	944	977.8	4.84	3.82	3.00
Medak	3077	3321	3240	8.05	12.47	8.89	830.8	1021	958.2	1.84	1.10	0.95
Hyderabad	90902	71020	77682	0.60	3.92	2.40	850.9	971.9	931.3	3.49	1.44	1.46
Rangareddy	2066	1666	1799	4.46	5.62	3.86	794	815.6	809.8	11.09	3.16	4.20
Mahabubnagar	3645	4080	3935	4.88	19.13	13.31	891.6	1011	993.6	4.16	12.43	8.79
Nalgonda	4612	3533	3893	15.00	12.11	9.42	991	884.3	918.4	0.28	2.10	1.35
Warangal	7323	5351	6008	4.93	8.40	5.37	850.3	1193	1083	1.94	4.68	3.49
Khammam	5780	4606	4998	10.63	11.39	8.11	1026	768.2	857.6	12.24	14.96	10.17
All	136231	111027	119460	0.25	0.49	0.32	877.5	982	947.1	2.46	1.19	1.12

# State: TELANGANA Sector: RURAL [SCHEDULE 1.0 TYPE-II] - MMRP

Table-S1.4(R): District wise estimated no. of persons(00), sex ratio and their RSEs for central, state and pooled sample

Dist name	Est ¡	persons	(00)	RSE of	Est p	ersons	S	ex rati	0	RSE	of Sex	ratio
	central	state	pooled	central	state	pooled	central	state	pooled	central	state	pooled
Adilabad	17172	18520	18061	3.56	7.44	5.16	718.9	939.8	870.4	20.94	2.02	6.21
Nizamabad	16789	21513	19939	0.20	4.70	3.38	990.6	989.9	995.4	8.26	7.46	5.69
Karimnagar	28134	27943	28008	14.15	2.32	5.04	1061	1040	1057	12.24	4.33	5.11
Medak	20415	22903	22074	7.38	2.10	2.70	917.6	1004	974.5	5.48	1.90	2.16
Hyderabad	-	-	-	-	-	-	-	-	ı	-	-	-
Rangareddy	18771	17978	18243	11.79	7.51	6.38	843.1	973.6	936.2	14.32	11.29	8.97
Mahabubnagar	24908	39088	34361	0.31	13.61	10.32	888.6	880.9	891.7	11.36	6.57	5.79
Nalgonda	28796	30682	30053	2.40	2.41	1.81	1022	905.2	955.6	2.96	17.53	11.33
Warangal	26577	25825	26076	0.79	8.30	5.49	985	973.2	975.3	4.38	8.03	5.52
Khammam	23919	21324	22189	8.94	4.74	4.42	941.6	932	947.8	21.19	5.45	8.14
All	205483	225778	218989	0.64	1.92	1.33	937.6	953	950	2.63	6.59	4.5

## State: TELANGANA Sector: URBAN [SCHEDULE 1.0 TYPE-II]- MMRP

Table-S1.4(U): District wise estimated no. of persons(00), sex ratio and their RSEs for central, state and pooled sample

Diet name	Est p	persons	(00)	RSE of	Est p	ersons	S	ex rati	0	RSE	of Sex	ratio
Dist name	central	state	pooled	central	state	pooled	central	state	pooled	central	state	pooled
Adilabad	5472	5667	5602	10.48	9.52	7.27	1135	921.3	992.1	12.18	2.40	4.85
Nizamabad	4020	6059	5380	9.89	8.63	6.93	901.8	1007	978.8	0.75	7.55	5.23
Karimnagar	8324	5677	6585	7.08	21.41	12.52	983.8	870.2	918.6	10.58	7.05	5.92
Medak	2633	3428	3163	2.76	8.51	6.20	862.6	833.3	854.8	27.30	2.70	9.75
Hyderabad	94358	74556	81191	3.44	0.49	1.37	932.3	890.7	905.5	4.57	2.18	2.13
Rangareddy	2187	1598	1794	0.55	3.53	2.11	828.3	843.9	843.3	17.70	3.05	6.22
Mahabubnagar	3650	4339	4109	0.54	2.05	1.45	809.4	986.8	927.7	2.94	1.33	1.28
Nalgonda	3696	3817	3777	14.48	14.23	10.69	989.5	964.6	975.4	19.34	5.20	7.34
Warangal	7332	5476	6095	5.06	2.15	2.40	1027	953.7	978.2	1.54	5.51	3.62
Khammam	5983	4378	4913	9.90	17.00	10.87	1062	862.5	924.3	11.67	3.31	4.90
All	137653	114996	122577	2.63	1.33	1.29	946.8	902.2	917.2	1.11	1.19	0.87

# State: TELANGANA Sector: RURAL [SCHEDULE 1.0 TYPE-I]

Table-S1.5(R): District wise estimated of MPCE (URP) for central, state and pooled sample

				sample	•				
Dist name	Се	ntral sam	ple	S	tate samı	ole		Pooled	
	Food	N-food	Total	Food	N-food	Total	Food	N-food	Total
Adilabad	666.02	600.63	1266.64	625.15	714.79	1339.94	630.42	637.31	1267.73
Nizamabad	551.73	527.44	1079.17	569.70	642.34	1212.04	565.00	598.09	1163.09
Karimnagar	603.65	708.91	1312.57	615.78	843.25	1459.03	605.02	826.35	1431.37
Medak	637.97	661.82	1299.79	582.44	684.25	1266.68	636.14	679.91	1316.05
Hyderabad	-	-	-	-	-	-	-	-	-
Rangareddy	793.02	1013.08	1806.10	694.72	973.31	1668.03	744.31	979.37	1723.68
Mahabubnagar	704.32	793.09	1497.41	719.25	768.72	1487.98	719.32	778.44	1497.76
Nalgonda	775.07	853.16	1628.23	638.23	987.49	1625.72	753.96	952.75	1706.71
Warangal	844.80	760.10	1604.91	633.28	768.30	1401.58	674.03	760.74	1434.77
Khammam	677.89	830.96	1508.85	693.80	1111.13	1804.93	678.82	840.08	1518.90
All	697.57	757.50	1455.07	643.95	832.53	1476.47	652.78	830.59	1483.37

# State: TELANGANA Sector: URBAN [SCHEDULE 1.0 TYPE-I]

Table-S1.5(U): District wise estimated of MPCE (URP) for central, state and pooled sample

	Ī			sample			Ī		
Dist name	Сеі	ntral sam	ple	St	ate samp	le		Pooled	
	Food	N-food	Total	Food	N-food	Total	Food	N-food	Total
Adilabad	792.09	898.18	1690.26	770.45	1356.55	2127.00	786.32	1093.35	1879.67
Nizamabad	690.18	828.47	1518.65	630.23	1018.14	1648.37	669.98	830.23	1500.21
Karimnagar	693.73	1220.74	1914.47	713.23	1361.02	2074.25	693.77	1226.61	1920.38
Medak	735.51	1033.50	1769.01	851.85	1383.51	2235.36	850.06	1182.60	2032.66
Hyderabad	1041.35	1775.16	2816.51	1057.04	2044.19	3101.22	1056.69	1899.54	2956.23
Rangareddy	880.78	1159.12	2039.90	758.63	1093.47	1852.10	827.46	1095.64	1923.10
Mahabubnagar	865.05	1127.42	1992.47	803.16	1093.98	1897.13	802.35	1106.24	1908.59
Nalgonda	909.95	1068.61	1978.56	770.57	1319.86	2090.43	869.22	1275.97	2145.19
Warangal	943.77	1315.38	2259.15	863.95	1875.65	2739.60	914.86	1442.22	2357.08
Khammam	915.33	1457.69	2373.02	726.66	1321.47	2048.13	873.59	1438.69	2312.28
All	968.13	1566.79	2534.92	949.34	1788.08	2737.42	958.64	1773.91	2732.55

# State: TELANGANA Sector: RURAL [SCHEDULE 1.0 TYPE-I]

Table-S1.6(R): District wise estimated of MPCE (MRP) for central, state and pooled sample

			1	sample	<b>:</b>	1			
Dist name	Се	ntral sam	ple	S	tate samı	ole		Pooled	
	Food	N-food	Total	Food	N-food	Total	Food	N-food	Total
Adilabad	666.02	734.16	1400.18	625.15	715.83	1340.98	630.42	724.45	1354.87
Nizamabad	551.73	650.81	1202.54	569.70	837.31	1407.01	565.00	652.57	1217.57
Karimnagar	603.65	836.08	1439.73	615.78	888.65	1504.44	605.02	836.51	1441.53
Medak	637.97	702.83	1340.80	582.44	773.14	1355.58	636.14	715.47	1351.61
Hyderabad	1	-	-	1	-	-	-	-	-
Rangareddy	793.02	1149.97	1942.98	694.72	1212.63	1907.35	744.31	1172.25	1916.56
Mahabubnagar	704.32	842.66	1546.98	719.25	817.09	1536.35	719.32	819.26	1538.58
Nalgonda	775.07	901.63	1676.70	638.23	947.96	1586.19	753.96	906.93	1660.89
Warangal	844.80	874.63	1719.43	633.28	790.16	1423.45	674.03	856.06	1530.09
Khammam	677.89	799.18	1477.06	693.80	809.96	1503.76	678.82	798.93	1477.75
All	697.57	835.67	1533.23	643.95	857.10	1501.04	652.78	857.05	1509.83

# State: TELANGANA Sector: URBAN [SCHEDULE 1.0 TYPE-I]

Table-S1.6(U): District wise estimated of MPCE (MRP) for central, state and pooled sample

	T			sample					
Dist name	Cer	ntral sam	ple	St	ate samp	ole		Pooled	
	Food	N-food	Total	Food	N-food	Total	Food	N-food	Total
Adilabad	792.09	1153.37	1945.45	770.45	1289.93	2060.38	786.32	1245.94	2032.26
Nizamabad	690.18	960.30	1650.48	630.23	1149.59	1779.81	669.98	971.60	1641.58
Karimnagar	693.73	1243.63	1937.36	713.23	1290.73	2003.96	693.77	1243.52	1937.29
Medak	735.51	1133.73	1869.24	851.85	1388.13	2239.98	850.06	1368.12	2218.18
Hyderabad	1041.35	1939.93	2981.27	1057.04	2144.47	3201.51	1056.69	1987.23	3043.92
Rangareddy	880.78	1421.78	2302.56	758.63	1245.48	2004.11	827.46	1253.68	2081.14
Mahabubnagar	865.05	1159.34	2024.39	803.16	1160.53	1963.69	802.35	1156.05	1958.40
Nalgonda	909.95	1138.91	2048.86	770.57	1239.87	2010.45	869.22	1180.86	2050.08
Warangal	943.77	1391.25	2335.03	863.95	1724.24	2588.19	914.86	1703.97	2618.83
Khammam	915.33	1375.98	2291.31	726.66	1172.73	1899.39	873.59	1172.63	2046.22
All	968.13	1703.14	2671.27	949.34	1841.01	2790.34	958.64	1769.21	2727.85

# State: TELANGANA Sector: RURAL [SCHEDULE 1.0 TYPE-II]

Table-S1.7(R): District wise estimated of MPCE (MMRP) for central, state and pooled sample

	Co	ntral sam	nla	sample	tate sam		Pooled			
Dist name					T	T			Г	
	Food	N-food	Total	Food	N-food	Total	Food	N-food	Total	
Adilabad	698.78	621.42	1414.85	724.43	730.93	1576.80	718.44	633.47	1351.91	
Nizamabad	645.31	646.10	1388.03	729.95	901.21	1729.93	645.58	661.54	1307.12	
Karimnagar	703.96	778.26	1572.80	689.35	727.95	1575.79	695.98	758.47	1454.45	
Medak	747.94	785.36	1642.74	690.52	796.59	1563.79	747.59	794.87	1542.46	
Hyderabad	-	-	-	-	-	-	-	-	-	
Rangareddy	992.96	1148.21	2256.11	771.42	931.15	1778.02	833.70	1008.42	1842.12	
Mahabubnagar	956.23	687.16	1746.56	867.99	676.75	1661.15	902.56	682.99	1585.55	
Nalgonda	899.83	809.46	1868.73	814.72	1128.31	2061.71	817.36	899.15	1716.51	
Warangal	911.79	765.57	1789.07	702.91	709.19	1566.34	904.07	761.28	1665.35	
Khammam	873.29	841.31	1836.03	998.51	799.19	1964.22	936.14	802.10	1738.24	
All	834.13	787.88	1732.02	781.46	817.97	1590.43	788.10	803.20	1591.30	

# State: TELANGANA Sector: URBAN [SCHEDULE 1.0 TYPE-II]

# Table-S1.7(U): District wise estimated of MPCE (MMRP) for central, state and pooled sample

Dist name	Ce	ntral samı	ple	S	tate samp	le		Pooled	
	Food	N-food	Total	Food	N-food	Total	Food	N-food	Total
Adilabad	824.14	1082.95	2009.52	938.48	1210.63	2270.85	824.89	1210.37	2035.26
Nizamabad	757.07	907.03	1735.03	825.88	1010.32	1949.07	778.43	907.42	1685.85
Karimnagar	866.36	1299.42	2224.39	858.26	1294.91	2314.72	869.34	1299.62	2168.96
Medak	869.91	1173.62	2146.20	894.74	1192.58	2208.67	870.55	1175.66	2046.21
Hyderabad	1195.44	1713.82	2996.22	1464.78	1896.00	3502.23	1196.78	1721.90	2918.68
Rangareddy	980.81	1345.36	2403.98	905.44	1167.34	2159.15	955.97	1173.31	2129.28
Mahabubnagar	1029.73	1233.66	2356.15	879.88	943.80	1913.49	1007.81	946.65	1954.46
Nalgonda	986.37	1090.63	2169.55	876.51	1041.55	2066.16	893.58	1039.67	1936.25
Warangal	1020.62	1333.73	2466.78	1033.96	1650.47	2813.06	1024.98	1644.34	2669.32
Khammam	1056.23	1606.95	2762.35	969.15	1077.65	2169.05	976.33	1144.69	2121.02
All	1112.97	1569.58	2682.55	1269.49	1647.64	2917.13	1113.50	1605.16	2718.66

State: TELANGANA Sector: RURAL [SCHEDULE 1.0 TYPE-I]

Table-S1.8(R): District wise estimate of RSE of Total MPCE for central, state and pooled sample

Dist code		URP			MRP	
Dist code	central	state	Pooled	central	state	Pooled
Adilabad	14.17	12.70	9.46	9.81	2.97	2.85
Nizamabad	6.33	6.18	4.43	0.70	5.30	0.69
Karimnagar	2.95	0.84	0.80	0.27	1.71	0.27
Medak	6.13	2.72	2.49	1.61	2.88	1.41
Hyderabad	-	-	-	-	-	-
Rangareddy	11.96	9.47	7.43	16.81	16.21	11.67
Mahabubnagar	5.90	1.73	1.66	2.86	0.41	0.41
Nalgonda	12.00	8.77	7.08	2.51	10.37	2.44
Warangal	3.07	0.76	0.74	2.81	0.20	0.20
Khammam	0.75	4.80	0.74	0.29	5.35	0.29
All	2.53	0.09	0.09	3.39	0.25	0.25

State: TELANGANA Sector: URBAN [SCHEDULE 1.0 TYPE-I]

Table-S1.8(U): District wise estimate of RSE of Total MPCE for central, state and pooled sample

Dist name		URP			MRP	
Dist name	central	state	Pooled	central	state	Pooled
Adilabad	5.82	5.17	3.89	6.30	3.86	3.29
Nizamabad	5.01	18.2	4.83	6.13	14.61	5.66
Karimnagar	1.17	15.79	1.16	0.65	18.26	0.65
Medak	8.74	5.05	4.40	15.24	1.80	1.79
Hyderabad	3.48	4.22	2.69	2.62	5.86	2.39
Rangareddy	3.48	3.42	2.44	4.60	2.72	2.34
Mahabubnagar	4.63	0.29	0.29	0.52	4.65	0.52
Nalgonda	10.18	5.41	4.77	6.74	9.33	5.47
Warangal	6.84	11.01	5.83	6.54	2.46	2.30
Khammam	2.22	9.74	2.17	3.11	1.04	0.98
All	3.31	0.37	0.37	1.8	1.83	1.28

State: TELANGANA - MMRP [SCHEDULE 1.0 TYPE-II]

Table-S1.9: District wise estimate of RSE of Total MPCE for central, state and pooled sample

Diet we we		RURAI	_		URBAN	
Dist name	central	state	Pooled	central	state	Pooled
Adilabad	3.53	8.39	3.25	4.07	5.26	3.22
Nizamabad	3.45	7.91	3.17	2.42	6.49	2.27
Karimnagar	4.95	1.43	1.38	3.71	16.58	3.62
Medak	8.51	10.76	6.68	7.02	6.05	4.58
Hyderabad				1.71	4.86	1.62
Rangareddy	17.95	15.4	11.75	3.82	3.96	2.75
Mahabubnagar	4.52	0.75	0.74	4.58	1.64	1.55
Nalgonda	17.02	8.97	7.94	12.32	4.33	4.08
Warangal	1.80	6.95	1.75	2.75	1.65	1.42
Khammam	2.10	0.24	0.24	4.90	1.26	1.22
All	6.04	4.37	3.54	1.91	4.61	1.77

# State: TELANGANA Sector: RURAL [SCHEDULE 1.0 TYPE-I AND TYPE-II] RUN TEST

TABLE-S1.10(R): DISTRICT WISE RESULTS OF RUN TEST OF MPCE (URP,MRP,MMRP) FOR POOLED SAMPLE  $Z_{0.01}$ =-2.33 {one sided test} reject if z-value < $Z_{0.01}$ 

Dist	District Name	UR	RP	MR	RP.	MM	IRP
code	District Hame	Z- <sub>VALUE</sub>	Accept	<b>Z-value</b>	Accept	<b>Z-value</b>	Accept
1	Adilabad	0.36	Yes	-0.33	Yes	0.59	Yes
2	Nizamabad	-1.00	Yes	-0.88	Yes	-0.42	Yes
3	Karimnagar	-0.96	Yes	0.73	Yes	1.30	Yes
4	Medak	-2.19	Yes	-0.14	Yes	-0.03	Yes
5	Hyderabad	-	-	-	-	-	-
6	Rangareddy	-0.19	Yes	0.73	Yes	0.61	Yes
7	Mahabubnagar	-0.75	Yes	-1.01	Yes	1.24	Yes
8	Nalgonda	0.56	Yes	-0.19	Yes	-1.03	Yes
9	Warangal	-3.47	No	-3.10	No	-2.63	No
10	Khammam	-0.75	Yes	-0.96	Yes	0.27	Yes
	AII						

# State: TELANGANA Sector: URBAN [SCHEDULE 1.0 TYPE-I AND TYPE-II] RUN TEST

TABLE-S1.10(U): DISTRICT WISE RESULTS OF RUN TEST OF MPCE (URP,MRP,MMRP) FOR POOLED SAMPLE  $Z_{0.01}$ =-2.33 {one sided test} reject if z-value < $Z_{0.01}$ 

Dist	District Name	UR	P	MR	<b>P</b>	ММ	RP
code	District Name	Z- <sub>VALUE</sub>	Accept	<b>Z-value</b>	Accept	<b>Z-value</b>	Accept
1	Adilabad	-0.13	Yes	-1.06	Yes	-1.46	Yes
2	Nizamabad	-0.87	Yes	-0.87	Yes	-1.36	Yes
3	Karimnagar	-0.82	Yes	-0.29	Yes	1.31	Yes
4	Medak	-2.17	Yes	0.11	Yes	-0.54	Yes
5	Hyderabad	-1.43	Yes	0.52	Yes	-1.72	Yes
6	Rangareddy	-1.46	Yes	-0.61	Yes	-2.68	No
7	Mahabubnagar	0.92	Yes	-0.05	Yes	-0.54	Yes
8	Nalgonda	-3.15	No	1.41	Yes	0.27	Yes
9	Warangal	-0.40	Yes	-0.13	Yes	-1.86	Yes
10	Khammam	-1.03	Yes	-1.36	Yes	-2.01	Yes
	All						

State: TELANGANA Sector: RURAL [SCHEDULE 1.0 TYPE-I AND TYPE-II] MEAN TEST

TABLE-S1.11(R): DISTRICT WISE TEST OF MPCE DIFFERENCE (URP,MRP,MMRP) FOR POOLED SAMPLE  $Z_{0.01}$ =-2.575 {one sided test} reject if absolute z-value > $Z_{0.01}$ 

Dist	District Name	UR	RP.	MR	P	MM	IRP
code		Z- <sub>VALUE</sub>	Accept	<b>Z-value</b>	Accept	<b>Z-value</b>	Accept
1	Adilabad	-0.25	Yes	0.47	Yes	-1.22	Yes
2	Nizamabad	-1.36	Yes	-2.74	No	-2.39	Yes
3	Karimnagar	-3.58	No	-2.53	Yes	0.09	Yes
4	Medak	0.51	Yes	-0.23	Yes	0.42	Yes
5	Hyderabad	-	-	-	-	1	-
6	Rangareddy	0.51	Yes	0.08	Yes	0.85	Yes
7	Mahabubnagar	0.15	Yes	0.28	Yes	1.09	Yes
8	Nalgonda	0.01	Yes	0.49	Yes	-0.49	Yes
9	Warangal	4.07	No	6.13	No	1.87	Yes
10	Khammam	-3.46	No	-0.41	Yes	-3.4	No
	All	-0.56	Yes	0.64	Yes	0.12	Yes

## State: TELANGANA Sector: URBAN [SCHEDULE 1.0 TYPE-I AND TYPE-II] MEAN TEST

TABLE-S1.11(U): DISTRICT WISE TEST OF MPCE DIFFERENCE (URP,MRP,MMRP) FOR POOLED SAMPLE  $Z_{0.01}$ =2.575 {one sided test} reject if absolute z-value > $Z_{0.01}$ 

Dist	District Name	UR	RP.	MR	P	ММ	RP
code	District Hame	Z- <sub>VALUE</sub>	Accept	<b>Z-value</b>	Accept	<b>Z-value</b>	Accept
1	Adilabad	-3.08	No	-0.91	Yes	-1.80	Yes
2	Nizamabad	-0.46	Yes	-0.49	Yes	-1.50	Yes
3	Karimnagar	-0.69	Yes	-0.40	Yes	-0.45	Yes
4	Medak	-2.43	Yes	-1.18	Yes	-0.28	Yes
5	Hyderabad	-1.77	Yes	-1.12	Yes	-2.86	No
6	Rangareddy	1.98	Yes	2.57	Yes	1.98	Yes
7	Mahabubnagar	0.97	Yes	0.85	Yes	3.93	No
8	Nalgonda	-0.29	Yes	0.35	Yes	0.54	Yes
9	Warangal	-1.33	Yes	-1.61	Yes	-4.27	No
10	Khammam	1.67	Yes	5.18	No	4.18	No
	All	-2.40	Yes	-1.70	Yes	-1.90	Yes

# State: TELANGANA Sector: Rural [SCHEDULE 1.0 TYPE-I ]

Table-S1.12(R): District wise estimate of RSE(URP) for central, state and pooled sample

	Ce	entral Sam	ple	S	tate Samp	le		Pooled	
Dist name	Food	Non- Food	Total	Food	Non- Food	Total	Food	Non- Food	Total
1	2	3	4	5	6	7	8	9	10
Adilabad	9.12	19.72	14.17	3.51	26.91	12.70	3.28	15.95	9.46
Nizamabad	2.76	15.91	6.33	1.67	10.17	6.18	1.43	8.61	4.43
Karimnagar	1.42	4.26	2.95	3.87	1.38	0.84	1.33	1.31	0.80
Medak	0.24	11.73	6.13	1.37	6.21	2.72	0.24	5.49	2.49
Hyderabad	-	-	-	-	-	-	-	-	-
Rangareddy	6.20	16.49	11.96	7.48	10.89	9.47	4.78	9.09	7.43
Mahabubnagar	7.38	4.60	5.90	0.56	3.87	1.73	0.56	2.96	1.66
Nalgonda	1.39	21.59	12.00	3.91	11.90	8.77	1.31	10.45	7.08
Warangal	4.71	1.24	3.07	2.98	3.87	0.76	2.54	1.18	0.74
Khammam	0.41	1.70	0.75	1.83	6.65	4.80	0.40	1.65	0.74
All	1.72	3.28	2.53	0.82	0.48	0.09	0.74	0.48	0.09

# State: TELANGANA Sector: Urban [SCHEDULE 1.0 TYPE-I ]

Table-S1.12(U): District wise estimate of RSE(URP) for central, state and pooled sample

	Cei	ntral Sam	ple	St	ate Samp	le	Pooled by Inverse Variance Method		
Dist name	Food	Non- Food	Total	Food	Non- Food	Total	Food	Non- Food	Total
1	2	3	4	5	6	7	8	9	10
Adilabad	0.60	11.56	5.82	1.00	8.65	5.17	0.52	7.09	3.89
Nizamabad	9.31	1.39	5.01	11.47	22.33	18.20	7.23	1.39	4.83
Karimnagar	1.63	2.75	1.17	8.95	19.29	15.79	1.60	2.72	1.16
Medak	9.93	7.89	8.74	1.53	7.20	5.05	1.51	5.37	4.40
Hyderabad	2.27	6.86	3.48	0.27	6.54	4.22	0.27	4.75	2.69
Rangareddy	3.72	8.98	3.48	4.94	2.36	3.42	2.98	2.28	2.44
Mahabubnagar	8.37	1.77	4.63	1.03	1.25	0.29	1.03	1.02	0.29
Nalgonda	2.31	16.74	10.18	4.21	6.11	5.41	2.03	5.75	4.77
Warangal	2.28	13.34	6.84	3.28	17.71	11.01	1.87	10.78	5.83
Khammam	1.25	4.41	2.22	2.88	16.84	9.74	1.15	4.27	2.17
All	1.68	6.4	3.31	1.7	1.47	0.37	1.2	1.44	0.37

# State: TELANGANA Sector: Rural [SCHEDULE 1.0 TYPE-I ]

Table-S1.13(R): District wise estimate of RSE(MRP) for central, state and pooled sample

	Cer	ntral Sam	ple	Sí	ate Samp	le		oled by Invriance Me	
Dist name	Food	Non- Food	Total	Food	Non- Food	Total	Food	Non- Food	Total
1	2	3	4	5	6	7	8	9	10
Adilabad	9.12	10.44	9.81	3.51	8.64	2.97	3.28	6.66	2.85
Nizamabad	2.76	1.05	0.70	1.67	7.76	5.30	1.43	1.04	0.69
Karimnagar	1.42	0.56	0.27	3.87	5.55	1.71	1.33	0.55	0.27
Medak	0.24	2.85	1.61	1.37	6.09	2.88	0.24	2.58	1.41
Hyderabad	-	-	-	-	-	-	-	-	-
Rangareddy	6.20	24.18	16.81	7.48	21.25	16.21	4.78	15.97	11.67
Mahabubnagar	7.38	0.92	2.86	0.56	0.29	0.41	0.56	0.27	0.41
Nalgonda	1.39	5.87	2.51	3.91	14.69	10.37	1.31	5.45	2.44
Warangal	4.71	0.97	2.81	2.98	2.04	0.20	2.54	0.88	0.20
Khammam	0.41	0.88	0.29	1.83	8.35	5.35	0.40	0.88	0.29
All	1.72	4.78	3.39	0.82	0.18	0.25	0.74	0.18	0.25

State: TELANGANA Sector: Urban [SCHEDULE 1.0 TYPE-I ]

Table-S1.13(U): District wise estimate of RSE(MRP) for central, state and pooled sample

D'	Ce	entral San	ıple	S	tate Samp	ble		ed by Inve ance Metl	
Dist name	Food	Non- Food	Total	Food	Non- Food	Total	Food	Non- Food	Total
1	2	3	4	5	6	7	8	9	10
Adilabad	0.60	11.09	6.30	1.00	6.75	3.86	0.52	5.78	3.29
Nizamabad	9.31	3.84	6.13	11.47	16.33	14.61	7.23	3.74	5.66
Karimnagar	1.63	0.10	0.65	8.95	23.24	18.26	1.60	0.10	0.65
Medak	9.93	18.65	15.24	1.53	3.86	1.80	1.51	3.78	1.79
Hyderabad	2.27	5.24	2.62	0.27	8.88	5.86	0.27	4.52	2.39
Rangareddy	3.72	5.15	4.60	4.94	1.36	2.72	2.98	1.32	2.34
Mahabubnagar	8.37	5.29	0.52	1.03	7.18	4.65	1.03	4.26	0.52
Nalgonda	2.31	10.24	6.74	4.21	12.54	9.33	2.03	7.93	5.47
Warangal	2.28	9.45	6.54	3.28	2.04	2.46	1.87	2.00	2.30
Khammam	1.25	6.04	3.11	2.88	0.11	1.04	1.15	0.11	0.98
All	1.68	3.78	1.80	1.70	3.65	1.83	1.20	2.63	1.28

State: TELANGANA Sector: Rural [SCHEDULE 1.0 TYPE-II ]

Table-S1.14(R): District wise estimate of RSE(MMRP) for central, state and pooled sample

Dist.	Ce	entral Sam	ple	S	tate Samj	ole		led by Inv iance Met	
Dist name	Food	Non- Food	Total	Food	Non- Food	Total	Food	Non- Food	Total
1	2	3	4	5	6	7	8	9	10
Adilabad	5.03	5.41	3.53	2.90	12.77	8.39	2.51	4.99	3.25
Nizamabad	0.43	3.12	3.45	6.79	8.86	7.91	0.43	2.95	3.17
Karimnagar	6.72	2.87	4.95	4.39	3.59	1.43	3.67	2.24	1.38
Medak	0.20	18.54	8.51	3.48	19.12	10.76	0.20	13.31	6.68
Hyderabad	-	-	-	-	-	-	-	-	1
Rangareddy	8.99	27.74	17.95	7.11	24.69	15.40	5.61	18.50	11.75
Mahabubnagar	4.10	6.40	4.52	3.87	4.49	0.75	2.82	3.68	0.74
Nalgonda	15.94	15.57	17.02	2.76	18.12	8.97	2.72	11.95	7.94
Warangal	0.69	3.06	1.80	4.51	10.92	6.95	0.68	2.95	1.75
Khammam	3.32	9.01	2.10	2.94	2.34	0.24	2.21	2.27	0.24
All	3.92	8.70	6.04	1.62	8.00	4.37	1.50	5.89	3.54

## State: TELANGANA Sector: Urban [SCHEDULE 1.0 TYPE-II ]

Table-S1.14(U): District wise estimate of RSE(MMRP) for central, state and pooled sample

D	Ce	entral Sam	ple	St	ate Samp	le		ed by Inve ance Meth	
Dist name	Food	Non- Food	Total	Food	Non- Food	Total	Food	Non- Food	Total
1	2	3	4	5	6	7	8	9	10
Adilabad	0.66	7.64	4.07	13.99	0.16	5.26	0.66	0.16	3.22
Nizamabad	4.33	0.20	2.42	6.18	3.85	6.49	3.55	0.20	2.27
Karimnagar	3.39	8.11	3.71	11.65	21.01	16.58	3.25	7.56	3.62
Medak	0.13	14.57	7.02	0.78	12.11	6.05	0.12	9.31	4.58
Hyderabad	1.90	1.29	1.71	17.39	5.18	4.86	1.88	1.26	1.62
Rangareddy	4.90	3.18	3.82	7.73	0.70	3.96	4.14	0.68	2.75
Mahabubnagar	1.43	6.58	4.58	4.03	0.88	1.64	1.35	0.88	1.55
Nalgonda	9.54	15.20	12.32	5.14	3.05	4.33	4.54	2.99	4.08
Warangal	0.66	6.09	2.75	0.99	0.70	1.65	0.55	0.69	1.42
Khammam	11.28	17.13	4.90	5.17	8.49	1.26	4.71	7.67	1.22
All	1.11	2.27	1.91	13.24	2.31	4.61	1.11	1.62	1.77

### **Chapter 6**

## **Pooled Results of Schedule 10 (Employment & Unemployment)**

#### State: TELANGANA Sector: RURAL [SCHEDULE 10] Pooling method: INVERSE WEIGHT OF VARIANCE Table-S2.1(R): District wise estimated no of persons(00) for central, state and pooled sample Male (00) Female (00) Persons (00) Dist name central state pooled central state pooled state pooled central Adilabad Nizamabad Karimnagar Medak Hyderabad Rangareddy Mahabubnagar Nalgonda Warangal Khammam All

## State: TELANGANA Sector: URBAN [SCHEDULE 10] Pooling method: INVERSE WEIGHT OF VARIANCE

Table-S2.1(U): District wise estimated no of persons(00) for central, state and pooled sample

		Male (00)			Female (00	))		Persons (00	)
Dist name	central	state	pooled	central	state	pooled	central	state	pooled
Adilabad	3126	2779	2794	3149	2809	2860	6275	5588	5662
Nizamabad	1992	2977	1995	1861	3376	2047	3853	6353	4060
Karimnagar	4672	2680	4671	4002	2708	3749	8674	5389	8509
Medak	1685	1543	1575	1554	1577	1576	3239	3120	3137
Hyderabad	48636	37266	48102	46432	35257	42192	95068	72522	92535
Rangareddy	1209	836	852	1005	747	756	2214	1583	1724
Mahabubnagar	2096	2104	2096	1860	2064	2026	3956	4168	4049
Nalgonda	2125	1919	1919	2243	1860	1903	4368	3779	3796
Warangal	3696	2740	2786	3355	3119	3119	7051	5859	6090
Khammam	2887	2907	2891	3214	2267	2668	6101	5174	5696
All	72124	57751	69681	68675	55784	62896	140799	113535	135258

#### State: TELANGANA Sector: RURAL [SCHEDULE 10] Pooling method: INVERSE WEIGHT OF VARIANCE Table-S2.2(R): District wise WPR per 1000(PS+SS) for central, state and pooled sample Female Male Persons Inverse weight Dist name central pooled central state central pooled state state Adilabad Nizamabad Karimnagar Medak Hyderabad Rangareddy Mahabubnagar Nalgonda Warangal Khammam AII

## State: TELANGANA Sector: URBAN [SCHEDULE 10] Pooling method: INVERSE WEIGHT OF VARIANCE

Table-S2.2(U): District wise WPR per 1000(PS+SS) for central, state and pooled sample

		Male	wek per 1		Female	,		Persons	
Dist name	central	state	pooled	central	state	pooled	central	state	pooled
Adilabad	481	590	544	202	122	127	339	350	350
Nizamabad	483	524	514	361	192	235	424	347	416
Karimnagar	503	586	586	255	216	227	388	400	402
Medak	516	579	577	198	209	208	363	391	386
Hyderabad	580	541	548	121	147	124	353	349	351
Rangareddy	490	491	491	158	111	129	339	310	325
Mahabubnagar	470	499	486	96	165	134	294	333	333
Nalgonda	550	555	555	207	242	221	371	402	372
Warangal	516	498	505	229	191	197	379	333	362
Khammam	511	472	492	158	70	138	323	298	318
All	555	538	539	150	157	154	355	350	350

#### State: TELANGANA Sector: RURAL [SCHEDULE 10] Pooling method: INVERSE WEIGHT OF VARIANCE Table-S2.3(R): District wise WPR per 1000 for central, state and pooled sample PS+SS cws Dist name central state pooled central state pooled central state pooled Adilabad Nizamabad Karimnagar Medak Hyderabad Rangareddy Mahabubnagar Nalgonda Warangal Khammam AII

#### State: TELANGANA Sector: URBAN [SCHEDULE 10] Pooling method: INVERSE WEIGHT OF VARIANCE Table-S2.3(U): District wise WPR per 1000 for central, state and pooled sample PS+SS cws CDS Dist name central state pooled central state pooled central state pooled Adilabad Nizamabad Karimnagar Medak Hyderabad Rangareddy Mahabubnagar Nalgonda Warangal Khammam ΑII

## State: TELANGANA Sector: RURAL [SCHEDULE 10] Pooling method: INVERSE WEIGHT OF VARIANCE

Table-S2.4(R): District wise LFPR per 1000 for central, stat
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	2.4(K). Dis	PS+SS	<u> </u>		cws		-	CDS	
Dist name	central	state	pooled	central	state	pooled	central	state	pooled
Adilabad	637	443	540	622	441	574	608	389	607
Nizamabad	613	539	611	610	544	606	604	536	594
Karimnagar	589	526	585	567	523	565	557	539	555
Medak	469	532	495	469	531	485	447	527	492
Hyderabad	-	-	-	-	-	-	-	-	-
Rangareddy	417	426	426	414	417	417	412	419	416
Mahabubnagar	557	552	552	549	555	553	530	552	533
Nalgonda	475	567	561	461	553	551	453	554	548
Warangal	517	517	517	516	497	514	509	463	468
Khammam	498	468	477	487	468	472	476	465	466
All	526	515	525	517	510	513	506	502	506

### State: TELANGANA Sector: URBAN [SCHEDULE 10] Pooling method: INVERSE WEIGHT OF VARIANCE

Table-S2.4(U): District wise LFPR per 1000 for central, state and pooled sample PS+SS cws CDS Dist name central state pooled central state pooled central state pooled Adilabad Nizamabad Karimnagar Medak Hyderabad Rangareddy Mahabubnagar Nalgonda Warangal Khammam All 

# State: TELANGANA Sector: RURAL [SCHEDULE 10] CHI-SQUARE TEST

# TABLE-S2.5 (R):DISTRICT WISE CHI-SQUARE VALUE OF DISTRIBUTION OF PERSONS OVER LABOUR FORCE FOR POOLED SAMPLE.

 $(x^2 \ 0.01 = 9.21 \ df = 2 [one sided test] reject if <math>x^2$ -value >  $x^2 \ 0.01)$ 

Dist	District Name	PS+	·SS	CW	S	CDS	5
code	2.50.150.140.110	X <sup>2</sup> - <sub>VALUE</sub>	Accept	X <sup>2</sup> - <sub>VALUE</sub>	Accept	X <sup>2</sup> - <sub>VALUE</sub>	Accept
1	Adilabad	2.94052	Yes	1.21418	Yes	0.57333	Yes
2	Nizamabad	0.19917	Yes	0.35755	Yes	1.33645	Yes
3	Karimnagar	17.2463	No	20.2165	No	23.005	No
4	Medak	0.61482	Yes	2.07141	Yes	1.292	Yes
5	Hyderabad	-	-	-	-	-	-
6	Rangareddy	15.3547	No	24.8714	No	22.9911	No
7	Mahabubnagar	21.4052	No	19.5862	No	13.7839	No
8	Nalgonda	0.06634	Yes	0.15481	Yes	0.01594	Yes
9	Warangal	9.99498	No	8.59734	Yes	7.32132	Yes
10	Khammam	1.11721	Yes	2.30369	Yes	1.79889	Yes
	All	9.7204	No	14.9769	No	20.5887	No

# State: TELANGANA Sector: URBAN [SCHEDULE 10] CHI-SQUARE TEST

# TABLE-S2.5 (U):DISTRICT WISE CHI-SQUARE VALUE OF DISTRIBUTION OF PERSONS OVER LABOUR FORCE FOR POOLED SAMPLE.

 $(x^2 \ 0.01 = 9.21 \ df=2 [one sided test] reject if <math>x^2$ -value >  $x^2 \ 0.01)$ 

Dist	District Name	PS+	·SS	CW	S	CDS	5
code	District Nume	X <sup>2</sup> - <sub>VALUE</sub>	Accept	X <sup>2</sup> -VALUE	Accept	X <sup>2</sup> - <sub>VALUE</sub>	Accept
1	Adilabad	0.04498	Yes	0.17886	Yes	0.39924	Yes
2	Nizamabad	1.52248	Yes	1.53585	Yes	0.53512	Yes
3	Karimnagar	5.18651	Yes	5.20571	Yes	5.14946	Yes
4	Medak	0.9767	Yes	0.96905	Yes	0.23887	Yes
5	Hyderabad	0.40892	Yes	0.3019	Yes	0.40001	Yes
6	Rangareddy	8.07145	Yes	8.46377	Yes	8.92434	Yes
7	Mahabubnagar	0	Yes	0.07	Yes	1.05259	Yes
8	Nalgonda	8.80952	Yes	8.07291	Yes	9.60463	No
9	Warangal	4.45865	Yes	5.43639	Yes	4.29021	Yes
10	Khammam	10.7335	No	10.6219	No	12.466	No
	All	3.68493	Yes	4.82469	Yes	4.70542	Yes

## State: TELANGANA Sector: RURAL [SCHEDULE 10] Z TEST

TABLE-S2.6 (R): DISTRICT WISE Z VALUE OF DISTRIBUTION OF PERSONS OVER LABOUR FORCE FOR POOLED SAMPLE.  $Z_{0.01}$ =2.575 [one sided test] reject if absolute z-value >  $Z_{0.01}$ )

Dist	District Name	PS+	SS	CW	S	CDS	5
code	2.5t. fee Hume	Z-value	Accept	<b>Z-value</b>	Accept	Z-value	Accept
1	Adilabad	6.35436	No	8.30823	No	13.811	No
2	Nizamabad	1.86675	Yes	1.96339	Yes	1.81179	Yes
3	Karimnagar	2.20948	Yes	1.87734	Yes	1.29729	Yes
4	Medak	4.14131	No	3.43714	No	3.70457	No
5	Hyderabad	-	1	1	ı	1	1
6	Rangareddy	0.67358	Yes	0.22393	Yes	0.46044	Yes
7	Mahabubnagar	0.20086	Yes	0.19191	Yes	0.94922	Yes
8	Nalgonda	3.55888	No	5.63951	No	4.33789	No
9	Warangal	0.03337	Yes	1.17381	Yes	17.2347	No
10	Khammam	0.53444	Yes	0.30975	Yes	0.16173	Yes
	All	1.28126	Yes	0.81591	Yes	0.50855	Yes

# State: TELANGANA Sector: URBAN [SCHEDULE 10] Z TEST

TABLE-S2.6 (U): DISTRICT WISE Z VALUE OF DISTRIBUTION OF PERSONS OVER LABOUR FORCE FOR POOLED SAMPLE.

 $Z_{0.01}$ =2.575 [one sided test] reject if absolute z-value >  $Z_{0.01}$ )

Dist	District Name	PS+	·SS	CW	S	CDS	
code	District Hame	<b>Z-value</b>	Accept	Z-value	Accept	Z-value	Accept
1	Adilabad	1.35606	Yes	1.41906	Yes	0.32418	Yes
2	Nizamabad	6.00495	No	6.923	No	7.38738	No
3	Karimnagar	0.10153	Yes	0.02335	Yes	0.44855	Yes
4	Medak	0.45312	Yes	0.52418	Yes	0.49518	Yes
5	Hyderabad	0.79708	Yes	0.9154	Yes	0.82511	Yes
6	Rangareddy	2.07614	Yes	2.13285	Yes	1.60769	Yes
7	Mahabubnagar	0.59891	Yes	0.59724	Yes	0.72579	Yes
8	Nalgonda	0.62492	Yes	2.47772	Yes	2.32781	Yes
9	Warangal	1.29884	Yes	1.60467	Yes	2.76307	No
10	Khammam	0.01101	Yes	0.0526	Yes	0.05468	Yes
	All	0.70095	Yes	0.76559	Yes	0.61099	Yes

## State: TELANGANA Sector: RURAL [SCHEDULE 10] Pooling method: INVERSE WEIGHT OF VARIANCE

Table-S2.7(R): District wise RSE of WPR for central, state and pooled sample

		Male			Female	•	ia pooiea s	Persons	
Dist namae	central	state	pooled	central	state	pooled	central	state	pooled
Adilabad	4.37	4.26	3.05	13.01	8.83	7.57	3.81	4.91	3.06
Nizamabad	9.55	0.29	0.29	10.23	14.59	8.42	0.96	7.25	0.95
Karimnagar	9.67	1.30	1.29	10.83	10.61	7.63	1.28	5.03	1.24
Medak	4.54	2.67	2.30	3.93	3.54	2.66	1.27	2.94	1.17
Hyderabad	-	-	-	-	-	-	-	-	-
Rangareddy	6.08	9.69	5.15	11.54	11.14	8.02	3.14	1.38	1.27
Mahabubnagar	2.75	4.43	2.34	8.35	0.67	0.66	5.48	2.27	2.10
Nalgonda	1.54	5.64	1.49	13.40	8.38	7.13	5.43	1.07	1.05
Warangal	0.59	6.07	0.59	3.28	10.99	3.14	1.12	1.72	0.94
Khammam	17.99	4.57	4.43	3.03	3.65	2.38	8.07	5.01	4.26
All	5.02	1.45	1.39	3.95	1.28	1.22	0.63	1.43	0.57

# State: TELANGANA Sector: URBAN [SCHEDULE 10] Pooling method: INVERSE WEIGHT OF VARIANCE

Table-S2.7(U): District wise RSE of WPR for central, state and pooled sample

		Male			Female			Persons	
Dist name	central	state	pooled	central	state	pooled	central	state	pooled
Adilabad	8.87	6.55	5.29	49.64	17.17	16.31	6.09	0.90	0.89
Nizamabad	9.81	4.99	4.45	18.42	19.05	13.80	1.07	3.86	1.04
Karimnagar	5.05	0.25	0.25	34.02	11.76	11.13	15.69	2.72	2.68
Medak	13.09	3.57	3.45	36.99	30.41	23.49	18.20	7.99	7.32
Hyderabad	1.31	0.66	0.59	9.60	20.24	8.70	4.37	3.97	2.94
Rangareddy	5.29	0.15	0.15	20.73	23.36	15.76	3.34	3.73	2.49
Mahabubnagar	8.98	6.36	5.19	29.63	19.16	16.56	18.88	0.45	0.45
Nalgonda	16.33	1.10	1.10	22.65	46.49	20.36	4.78	9.93	4.31
Warangal	6.29	4.86	3.85	24.24	11.92	10.72	4.71	6.93	3.90
Khammam	4.97	4.98	3.52	13.74	47.57	13.64	8.16	12.12	6.77
All	2.85	0.42	0.42	7.55	5.84	4.62	5.07	1.15	1.12

## State: TELANGANA Sector: RURAL [SCHEDULE 10] Pooling method: INVERSE WEIGHT OF VARIANCE

Table-S2.8(R): District wise RSE of WPR for central, state and pooled sample

		PS+SS			cws			CDS	
Dist name	central	state	pooled	central	state	pooled	central	state	pooled
Adilabad	3.77	4.91	3.04	2.71	4.31	2.33	0.81	4.18	2.34
Nizamabad	0.96	7.25	0.95	0.86	5.98	0.85	1.85	6.49	4.21
Karimnagar	1.28	5.03	1.24	0.84	5.24	0.83	1.04	2.33	1.57
Medak	1.27	2.94	1.17	2.68	3.69	2.17	3.61	3.48	2.67
Hyderabad	-	-	-	-	-	-	-	-	-
Rangareddy	3.11	1.38	1.26	2.67	0.50	0.49	1.25	1.69	1.21
Mahabubnagar	5.48	2.27	2.10	5.33	2.58	2.32	3.57	4.16	3.05
Nalgonda	5.28	1.05	1.03	3.02	0.29	0.29	5.37	0.40	1.56
Warangal	1.12	1.72	0.94	1.25	2.36	1.10	0.39	1.36	0.88
Khammam	8.07	5.01	4.26	9.29	4.99	4.39	11.71	4.42	4.95
All	0.64	1.43	0.58	1.45	1.08	0.87	0.64	1.35	0.92

# State: TELANGANA Sector: URBAN [SCHEDULE 10] Pooling method: INVERSE WEIGHT OF VARIANCE

Table-S2.8(U): District wise RSE of WPR for central, state and pooled sample

								<u> </u>	
Dist		PS+SS			cws			CDS	
Dist name	central	state	pooled	central	state	pooled	central	state	pooled
Adilabad	6.09	0.90	0.89	3.55	1.35	1.26	3.63	3.00	2.34
Nizamabad	1.07	3.86	1.04	0.01	3.61	0.01	0.01	3.20	2.00
Karimnagar	15.69	2.72	2.68	15.69	3.17	3.11	15.69	2.91	5.44
Medak	18.20	7.99	7.32	19.49	17.84	13.17	18.07	20.02	14.81
Hyderabad	4.37	3.97	2.94	4.13	3.74	2.77	4.21	3.96	2.98
Rangareddy	3.34	3.62	2.46	1.14	3.02	1.07	2.26	2.28	1.68
Mahabubnagar	18.88	0.45	0.45	18.88	1.31	1.31	17.98	2.74	5.84
Nalgonda	4.78	9.93	4.31	4.78	1.02	1.00	5.38	0.90	1.71
Warangal	4.71	6.93	3.90	4.90	5.58	3.69	2.39	2.54	1.83
Khammam	8.16	12.12	6.77	8.16	12.39	6.82	7.49	12.47	8.52
All	5.07	1.15	1.12	5.00	1.01	0.99	5.12	1.29	1.93

## State: TELANGANA Sector: RURAL [SCHEDULE 10] Pooling method: INVERSE WEIGHT OF VARIANCE

Table-S2.9(R): District wise RSE of LFPR for central, state and pooled sample									
		PS+SS			cws			CDS	
Dist name	central	state	pooled	central	state	pooled	central	state	pooled
Adilabad	3.40	4.83	2.83	1.83	4.24	1.70	0.16	4.09	2.26
Nizamabad	0.96	7.23	0.95	1.27	5.96	1.25	2.30	6.47	4.22
Karimnagar	1.17	5.20	1.14	0.89	4.38	0.87	0.81	2.35	1.56
Medak	2.13	2.18	1.53	2.01	2.91	1.65	3.66	2.68	2.17
Hyderabad	-	-	-	-	-	-	-	-	-
Rangareddy	3.39	0.78	0.76	2.89	1.28	1.17	2.69	2.63	1.98
Mahabubnagar	4.18	1.89	1.72	4.74	2.45	2.18	1.76	3.88	2.68
Nalgonda	5.27	1.15	1.12	3.50	0.50	0.50	4.97	1.05	1.62
Warangal	1.23	2.29	1.08	1.21	3.07	1.13	0.49	0.19	0.21
Khammam	9.04	6.86	5.47	11.35	6.80	5.83	12.50	6.44	6.01
All	0.60	1.56	0.56	1.29	1.12	0.85	0.51	1.50	1.01

## State: TELANGANA Sector: URBAN [SCHEDULE 10] Pooling method: INVERSE WEIGHT OF VARIANCE

Table-S2.9(U): District wise RSE of LFPR for central, state and pooled sam	Table-S2.9	(U): I	District wise	RSE of LFPR	for central	, state and	pooled sample
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		PS+SS			cws			CDS	
Dist name	central	state	pooled	central	state	pooled	central	state	pooled
Adilabad	2.62	1.93	1.55	1.27	1.25	0.89	0.97	0.05	0.33
Nizamabad	1.56	3.52	1.43	0.55	3.27	0.54	0.55	2.91	1.82
Karimnagar	15.60	3.44	3.36	15.60	3.89	3.78	15.60	3.75	5.68
Medak	17.95	6.91	6.45	17.95	16.56	12.18	16.98	17.99	13.43
Hyderabad	2.51	3.59	2.06	1.90	3.57	1.68	2.00	3.56	2.44
Rangareddy	3.43	2.66	2.11	3.48	1.92	1.68	4.20	1.37	1.72
Mahabubnagar	19.24	1.12	1.12	19.24	1.97	1.96	18.09	3.39	6.08
Nalgonda	5.93	7.63	4.69	5.93	0.69	0.69	6.51	0.80	2.03
Warangal	5.71	7.56	4.56	5.90	5.41	4.00	3.56	3.28	2.46
Khammam	10.27	20.81	9.21	8.13	21.81	7.62	8.13	21.32	14.48
All	4.02	0.72	0.71	3.53	0.70	0.69	3.71	0.83	1.38

# **Household Consumer Expenditure**



# **Employment and Unemployment**

