Estimation and Analysis of LFPR , WPR , UR among the states Kerala , Goa & UttarPradesh using PLFS unit level data 2017-2022

INTERNSHIP REPORT

Submitted by

GOVIND HARI

SUMMER INTERN

NATIONAL SAMPLE SURVEY OFFICE

Field Operations Division , Regional Office

Panaji , Goa

June 10 - August 10 (2024)

DECLARATION BY THE INTERN

Myself, GOVIND HARI is submitting the project report entitled "... " to the National Statistical Office(NSO), Field Operations Division (FOD), Regional Office(RO), Ministry of Statistics And Programme Implementation (MoSPI), Panaji, Goa for the fulfilment of the internship program for Postgraduates & Research Scholars 2024-25 conducted for the period of 10^{th} June – 10^{th} August 2024

Place : Porvorim , Goa

Date : 09-08-2024

Name of the student

GOVIND HARI

Ministry of Statistics and Programme Implementation

National Sample Survey Office (FOD)

Regional Office , Panaji , Goa

2024

CERTIFICATE

This is to certify that the project report entitled "...." submitted to the National Statistical Office (NSO), Field Operations Division(FOD), Regional Office(RO), Ministry Of Statistics and Programme Implementation (MoSPI), Panaji, Goa by GOVIND HARI (intern) for the fulfilment of his Internship Program for postgraduate /Research Scholars 2024-25

Supervisor

Rupali Karne ISS
Assistant Director
NSSO Regional Office (FOD)
Panaji , Goa

Supervisor

Bamane Mohan Jinnappa ISS
Joint Director
NSSO Regional Office (FOD)
Panaji , Goa

ACKNOWLEDGEMENT

I take this opportunity to express my sincere gratitude and appreciation to the National Statistical Office (NSO), Regional Office (RO), Panaji, for giving me this opportunity to participate in this internship program offered by the Ministry of Statistics and Program Implementation (MoSPI). I am particularly indebted to the Joint Director Shri. Bamane Mohan Jinnappa ISS, for his invaluable guidance, support and encouragement throughout my internship. He has become an inspiration for me throughout this internship. I would also like to extend my gratitude to the Assistant Director Rupali Karne ISS, for her constant guidance and encouragement for the completion of my project. Her insights and suggestions have been crucial in expanding my knowledge and skills in statistical methodologies. Her approachable nature and willingness to provide guidance have immensely contributed to my professional growth. Furthermore, I would like to acknowledge the Senior Statistical Officers Ajith Phape , Deepak ,Antima Choudhary for their continuous support and valuable inputs throughout the internship period. Their wealth of experience and commitment to excellence have been a source of inspiration and motivation for me. I am thankful for the valuable guidance and the opportunities provided me to enhance my knowledge on official statistical system and working of NSO. Also, I am greatful to the survey enumerators who accompanied us in the field visits which gave me a practical knowledge on survey methodology and data collection techniques in addition to the theoretical knowledge I acquired from the manuals and discussion with the senior officials. I would also like to extend my gratitude to the entire team at NSSO Regional Office, Panaji for their cooperation, assistance, and valuable feedback during the internship. Their collaborative spirit and willingness to share knowledge have created a conductive learning environment.

This internship has been a transformative experience for me and I am grateful for the knowledge and skills I have gained.

GOVIND HARI

Abstract

Contents

ABBREVIATIONS

ASUSE	Annual Survey of Unincorporated Sector Enterprises
HCES	Household Consumption Expenditure Survey
WPR	Worker Population Rate
PLFS	Periodic Labour Force Survey

Chapter 1

INTRODUCTION

1.1 PERIODIC LABOUR FORCE SURVEY

Considering the importance of availability of labour force data at more frequent time intervals, National Sample Survey Office (NSSO) launched Periodic Labour Force Survey (PLFS) in April 2017. The objective of PLFS is primarily two fold:

1. To estimate the key employment and unemployment indicators (viz. Worker Population Ratio, Labour Force Participation Rate, Unemployment Rate) in the short time interval of three months for the urban areas only in the 'Current Weekly Status' (CWS).

2. To estimate employment and unemployment indicators in both 'Usual Status' (ps+ss) and CWS in both rural and urban areas annually.

   The indicators released in Annual Report of PLFS are the following

- Labour Force Participation Rate (LFPR), Worker Population ratio (WPR) and Unemployment Rate
- Distribution of workers by status in Employment
- Distribution of workers by industry of work as National Industrial Classification (NIC)
- Distribution of workers by occupation as National Classification of Occupation (NCO)
- Employment in Informal Sector and conditions of employment
- Earnings from employment
- Hours worked

1.1.1 Geographical coverage of the survey

The survey covers the whole of the Indian Union except the villages in Andaman and Nicobar Islands which remain extremely difficult to access throughout the year

1.1.2 Schedules of Enquiry

Computer-assisted personal interviewing (CAPI) software has been developed for collection of information in PLFS. The CAPI software is based on the following schedules of enquiry

Schedule 0.0PL	List of households
Schedule 10.4	Employment and Unemployment (First Visit)
Schedule 10.4	Employment and Unemployment (Revisit)

A mapping between CAPI items and the above mentioned Schedules of PLFS has been prepared by Data Processing Division (DPD) of NSSO. This may be used for referencing the items / columns of the above mentioned Schedules with CAPI developed for collection of information for PLFS.

1.2 Sample Design

1.2.1 Rotational Scheme of Periodic Labour Force Survey (PLFS)

A rotational panel sampling design will be used in urban area. The rotational scheme will be of two years duration to accommodate the changes in the urban frame in the intracensal period; in the sense that the sampling frames for both rural and urban areas will remain unchanged for every two-year duration. In this rotational panel scheme each selected household in urban areas will be visited four times – one with first visit schedule and other three with revisit schedule. The estimates can be given for successive quarters without any break in the series (starting from the fifth quarter), ensuring a 75 matching between consecutive quarters. Regression based estimates will not be generated. Instead,

usual traditional design based estimates will be generated. The proposed design aims at generating quarterly estimates of level and change parameters of some important labour force indicators (LFPR, WPR and UR) based on CWS data in urban areas and annual estimates of level parameters based on usual status for both rural and urban areas in the line of employment and unemployment survey of NSS quinquennial round.

1.2.2 Rotational panel design for urban areas

i. The rotational panel will be for two years (the present panel of 2 years covers the period July 2021- June 2023), where only 25% FSUs of urban annual allocation were covered in the first quarter (Panel P31) of the third two year panel with detail listing and canvassing of visit 1 Schedule in the selected households; where Pij indicates the panel belonging to jth quarter of the ith two-year period of rotation

ii. Another 25% FSUs were covered in the second quarter (Panel P32) for taking up visit 1 Schedule and revisit Schedule were canvassed in the selected households of Panel P31

iii. A new panel P33 of 25% FSUs was surveyed in third quarter with visit 1 Schedule and revisit Schedules were canvassed in the households of panels P31 & P32.

iv. In the fourth quarter, households of panels P31, P32 & P33 were surveyed with revisit Schedule and a new panel P34 with 25% FSUs for visit 1 Schedule

v. In the subsequent quarters of second year (i.e., for 4 quarters of July 2022- June 2023) of the third two year panel, 75% FSUs will be common with the previous quarter (for the first quarter of July 2022- June 2023, panels P32, P33 & P34 will be common with the previous quarter) and an earlier panel will be replaced by a new panel (for the first quarter of July 2022- June 2023 P31 will be replaced by P35) for canvassing visit 1 schedule. This will continue till 8th quarter of the third two year panel (i.e., till the last quarter of the period July 2022- June 2023).

vi. All the FSUs of the panels P31, P32, ..., P38 (each of which is with 25% of FSUs) were selected before commencement of survey in the first quarter.

vii. At the end of the second year of each two-year duration, updated frame are used for both rural and urban areas

1.2.3 Rural areas

For rural areas, samples for all the 8 quarters (covering the period July 2021- June 2023) were selected before commencement of survey for each two year period, while the frame remained same for this duration. In each quarter, only 25% FSUs of annual allocation (as is done in each sub-round of NSS rounds) were covered in rural areas so that independent estimates could be generated for each quarter. For this purpose, quarterly allocation is multiple of 2 for drawing interpenetrating sub-samples. There is no revisit in the rural samples.

The following table gives the rotational panel schemes in tabular format

	panels for the fourth 2 year period								panels from updated frame for the next 2 year period			
	During the four quarters of the seventh year				During the four quarters of the eighth year				During the four quarters of the ninth year			
	Qtr1	Qtr2	Qtr3	Qtr4	Qtr1	Qtr2	Qtr3	Qtr4	Qtr1	Qtr2	Qtr3	Qtr4
Urban Panel	P_{41}*	P_{41}	P_{41}	P_{41}	P_{45}*	P_{45}	P_{45}	P_{45}	P_{51}*	P_{51}	P_{51}	P_{51}
	P_{38}	P_{42}*	P_{42}	P_{42}	P_{42}	P_{46}*	P_{46}	P_{46}	P_{46}	P_{52}*	P_{52}	P_{52}
	P_{37}	P_{38}	P_{43}*	P_{43}	P_{43}	P_{43}	P_{47}*	P_{47}	P_{47}	P_{47}	P_{53}*	P_{53}
	P_{36}	P_{37}	P_{38}	P_{44}*	P_{44}	P_{44}	P_{44}	P_{48}*	P_{48}	P_{48}	P_{48}	P_{54}*
Rural	R_{41}*	R_{42}*	R_{43}*	R_{44}*	R_{45}*	R_{46}*	R_{47}*	R_{48}*	Fresh rural samples in ninth year from the updated frame			
Visit 1 schedule will be canvassed R_{ij} indicates samples to be covered in rural areas in j^{th} quarter of i^{th} two-year period												

1.2.4 Outline of the Design

A stratified multi-stage design would be adopted. The first stage units (FSU) are the Urban Frame Survey (UFS) blocks in urban areas and 2011 Population Census villages (Panchayat

wards for Kerala) in rural areas. The ultimate stage units (USU) are households. As in usual NSS rounds, in the case of large FSUs one intermediate stage unit, called hamlet group/sub-block, will be formed

1.2.5 Stratification

In urban areas strata will be formed within each NSS region on the basis of size class of towns as per Population Census 2011. The tentative stratum numbers and their composition (within each region) will be as follows: **stratum 1**: all towns with population less than 50,000 **stratum 2**: all towns with population 50,000 or more but less than 3 lakhs **stratum 3**: all towns with population 3 lakhs or more but less than 15 lakhs stratum 4, 5, 6,...: each city with population 15 lakhs or more

1.2.6 Sub-Stratification

Urban: In urban areas there will be no sub-stratification. **Rural**: 'r/8' sub-strata will be formed in each rural stratum, if 'r' is the sample size allocated for a rural stratum

1.2.7 Total sample size (FSUs):

12800 FSUs (7024 villages and 5776 UFS blocks) will be covered annually at all-India level

1.2.8 Selection of first stage units:

Urban FSUs will be selected by probability proportional to size with replacement (PPSWR) scheme, size being the number of households in the UFS block. In the rural areas samples for a stratum/sub-stratum will be drawn randomly in the form of two independent sub-samples with probability proportional to size with replacement (PPSWR) scheme, size being the population of the village and equal number of samples will be allocated among the four quarters. In both rural and urban sector sample FSUs are drawn independently for each quarter

1.2.9 Formation of Second Stage Strata and allocation of Households

composition of SSS (rural)	SSS	number of members	number of households to be surveyed	
			FSU without hg formation	FSU with hg formation (for each hg)
number of members in the household having level of general education as secondary (10th standard) or above	SSS 1	2 or more	2	1
	SSS 2	1	4	2
	SSS 3	0	2	1
TOTAL			**8**	
composition of SSS (urban)	SSS	number of members	number of households to be surveyed	
			FSU without sb formation	FSU with sb formation (for each sb)
number of members in the household having level of general education as secondary (10th standard) or above	SSS 1	3 or more	2	1
	SSS 2	2	2	1
	SSS 3	1	2	1
	SSS 4	0	2	1
TOTAL			**8**	

1.2.10 Selection of households:

From each SSS the sample households will be selected by SRSWOR

1.3 Concepts and Definitions of PLFS

1.3.1 Population coverage:

The following rules regarding the population to be covered are to be remembered in listing of households and persons:

i. Under-trial prisoners in jails and indoor patients of hospitals, nursing homes etc., are to be excluded, but residential staff therein will be listed while listing is done in such institutions. The persons of the first category will be considered as normal members of their parent households and will be counted there. Convicted prisoners undergoing sentence will be outside the coverage of the survey.

ii. Floating population, i.e., persons without any normal residence will not be listed. But households residing in open space, roadside shelter, under a bridge, etc., more or less regularly in the same place, will be listed.

iii. Foreign nationals will not be listed, nor their domestic servants, if by definition the latter belong to the foreign national's household. If, however, a foreign national becomes an Indian citizen for all practical purposes, he or she will be covered.

iv. Persons residing in barracks of military and paramilitary forces (like police, BSF, etc.) will be kept outside the survey coverage due to difficulty in conduct of survey therein. However, civilian population residing in their neighbourhood, including the family quarters of service personnel, are to be covered. Permission for this may have to be obtained from appropriate authorities.

v. Orphanages, rescue homes, ashrams and vagrant houses are outside the survey coverage. However, persons staying in old age homes, students staying in ashrams/ hostels and the residential staff (other than monks/ nuns) of these ashrams may be listed. For orphanages, although orphans are not to be listed, the persons looking after them and staying there may be considered for listing

1.3.2 House:

Every structure, tent, shelter, etc. is a house irrespective of its use

1.3.3 Household:

A group of persons normally living together and taking food from a common kitchen will constitute a household.

1.3.4 Economic activity:

The entire spectrum of human activity falls into two categories – economic activities and non-economic activities.
The term 'economic activity' as defined in the PLFS, therefore, included:

i. all the market activities performed for pay or profit which result in production of goods and services for exchange.

ii. 2 of the non-market activities,
(a) all the activities relating to the agriculture, forestry, fishing, mining and quarrying sector (i.e. industry Divisions 01 to 09 of NIC-2008) which result in production of primary goods for own consumption (including free collection of uncultivated crops, forestry, firewood, hunting, fishing, mining, quarrying, etc.)
(b) activities relating to the own-account production of fixed assets, which include production of fixed assets including construction of own houses, roads, wells, etc., and of machinery, tools, etc., for household enterprise and also construction of any private or community facilities free of charge. A person may be engaged in own account construction in the capacity of either a labour or a supervisor

1.3.5 Activity status

According to this, a person could be in one or a combination of the following three broad activity statuses during the reference period:

i. working or being engaged in economic activity (work),

ii. being not engaged in economic activity (work) but either making tangible efforts to seek 'work' or being available for 'work' if 'work' is available and

iii. being not engaged in any economic activity (work) and also not available for 'work'

1.3.6 Code Description

Usual Principle Activity Staus are given below

activity status	code
worked in household enterprise (self-employed) as own account worker	...11
worked in household enterprise (self-employed) as employer	...12
worked as helper in household enterprises (unpaid family worker)	...21
worked as regular salaried/wage employee	...31
worked as casual wage labour : in public works	...41
in other types of work	...51
did not work but was seeking and/or available for work	...81
attended educational institutions	...91
attended domestic duties only	...92
attended domestic duties and was also engaged in free collection of goods (vegetables, roots, firewood, cattle-feed etc) sewing, tailing, weaving, etc. for hh. use	...93
rentiers, pensioners, remittance recipients, etc.	...94
not able to work due to disability	...95
others (including begging, prostitution, etc.)	...97

Codes 11, 12, 21, 31, 41 & 51 refer to the 'employed', 81 to the 'unemployed' and the remaining viz. 91 to 97 refer to the 'not in labour force'. For children of age 0 - 4 years, code 97 may be given.

1.3.7 Workers (or employed)

Persons who were engaged in any economic activity or who, despite their attachment to economic activity, abstained themselves from work for reason of illness, injury or other physical disability, bad weather, festivals, social or religious functions or other contingencies necessitating temporary absence from work, constituted workers. Unpaid household members who assisted in the operation of an economic activity in the household farm or non-farm activities were also considered as workers. **Relevant activity status codes 11 to 72 were assigned for workers. Workers were further categorized as self-employed (relevant activity status codes: 11, 12, 21, 61, 62), regular wage /salaried employee (relevant activity status codes: 31, 71, 72),and casual labour (relevant activity status codes: 41, 42 and 51).**

1.3.8 Seeking or available for work (or unemployed)

Persons who, owing to lack of work, had not worked but either sought work through employment exchanges, intermediaries, friends or relatives or by making applications to prospective employers or expressed their willingness or availability for work under the prevailing conditions of work and remuneration, were considered as those 'seeking or available for work' (or unemployed). Activity status codes 81 or 82 were assigned for unemployed.

1.3.9 Labour force

Persons who were either 'working' (or employed) or 'seeking or available for work' (or unemployed) constituted the labour force. Persons with activity status codes 11 – 82 constituted the labour force.

1.3.10 Not in labour force

Persons who were neither 'working' nor 'seeking or available for work' for various reasons during the reference period were considered as 'not in labour force'. Persons under this

category are students, those engaged in domestic duties, rentiers, pensioners, recipients of remittances, those living on alms, infirm or disabled persons, too young persons, prostitutes, etc. and casual labours not working due to sickness. 17 Activity status codes 91-95, 97,98 and 99 were assigned for persons belonging to category 'not in labour force'.

1.3.11 Usual activity status

The usual activity status relates to the activity status of a person during the reference period of 365 days preceding the date of survey. The activity status on which a person spent relatively long time (major time criterion) during the 365 days preceding the date of survey was considered the usual principal activity status of the person

1.3.12 Subsidiary economic activity status

Usual principal status of a person was determined as the status on which the person spent relatively long time (major time criterion) during the 365 days preceding the date of survey. Such persons might have also pursued, in addition to his/her usual principal status, some economic activity for 30 days or more during the reference period of 365 days preceding the date of survey. The status in which such economic activity was pursued during the reference period of 365 days preceding the date of survey was the subsidiary economic activity status of the person

1.3.13 Current weekly activity status (CWS)

The current weekly activity status of a person is the activity status obtaining for a person during a reference period of 7 days preceding the date of survey

1.3.14 Current daily activity status (CDS)

The current daily activity status 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

1.3.15 Conceptual Framework of Key Employment and Unemployment Indicators

From the Periodic Labour Force Survey (PLFS), the Key employment and unemployment Indicators viz. LFPR, WPR, PU and UR are derived. The definitions of these indicators are as follows:

i. Labour force participation rate (LFPR): LFPR is defined as the percentage of persons in the labour force in the population.

ii. Worker Population Ratio (WPR): WPR defined as the percentage of employed persons in the population.

iii. Proportion Unemployed (PU): It is defined as the percentage of persons unemployed in the population.

iv. Unemployment Rate (UR): UR is defined as the percentage of persons unemployed among the persons in the labour force.

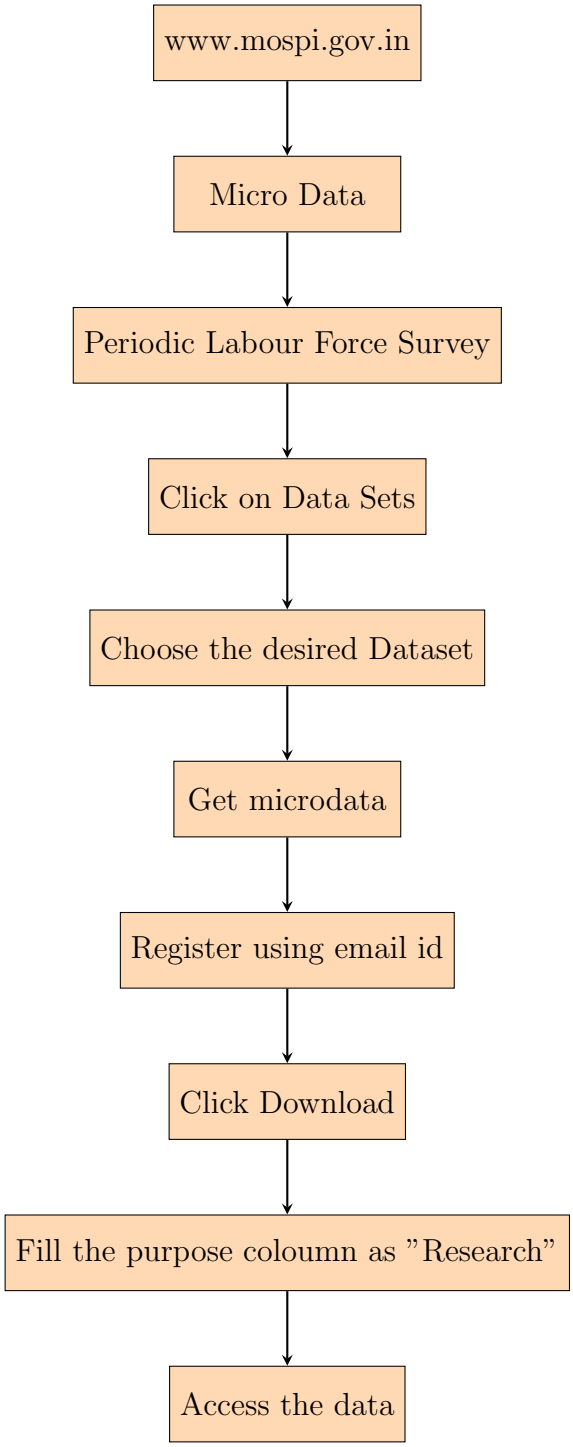
The architecture of key labour force indicators are given below in tabular form

<table>
<tr><th colspan="2">activity profile</th><th rowspan="2">key indicators</th></tr>
<tr><th>activity status(code)</th><th>category of persons</th></tr>
<tr><td>11, 12, 21, 31, 41, 42, 51, 61, 62, 71, 72</td><td>workers</td><td rowspan="2">1. Labour Force Participation Rate (LFPR):
$\frac{no.\ of\ employed\ persons + no.of\ unemployed\ persons}{total\ population} * 100$
2. Worker Population Ratio (WPR): $\frac{no.\ of\ employed persons}{total\ population} * 100$
3. Proportion Unemployed (PU):
$\frac{no.of\ unemployed\ persons}{total\ population} * 100$
4. Unemployment Rate (UR):
$\frac{no.of\ unemployed persons}{no.\ of\ employed\ persons + no.of\ unemployed\ persons} * 100$</td></tr>
<tr><td>81, 82</td><td>unemployed</td></tr>
<tr><td>91, 92 93, 94, 95, 97, 98, 99</td><td>not in labour force</td><td></td></tr>
<tr><td colspan="3">Note: Activity status codes, 42, 61, 62, 71, 72, 82, and 98 are used only in the current status and the remaining activity status codes are used in both usual status and in current status</td></tr>
</table>

Chapter 2

PROJECT METHODOLOGY

2.1 Accessing the Data from MoSPI



2.2 Extracting the PLFS Unit level Data

After downloading the data from MoSPI website extract the data using fixed width format in Excel with the help of byte positions in Data Layout given in the website

PLFS PERSON LEVEL DATA REVISIT) OF 2022-2023							
File: PERRV.txt (PERSON LEVEL)			RECORD LENGTH: 275+1				
Srl	**Full Name**	**Block**	**Item /Col.**	**Field Length**	**Byte Position**		**Remarks**
1	File Identification			4	1	4	RVP6
2	Schdule	1	2	3	5	7	104
3	Quarter			2	8	9	Q5 to Q8
4	Visit			2	10	11	V2' for second visit,' V3' for third visit & 'V4' for fourth visit
5	Sector	1	3	1	12	12	
6	State/Ut Code			2	13	14	
7	District Code	1	4	2	15	16	
8	NSS-Region	1	4	3	17	19	
9	Stratum	1	5	2	20	21	
10	Sub-Stratum	1	6	2	22	23	
11	Sub-Sample	1	11	1	24	24	
12	Fod Sub-Region	1	12	4	25	28	
13	FSU	1	1	5	29	33	
14	Sample Sg/Sb No.	1	13	1	34	34	
15	Second Stage Stratum No.	1	14	1	35	35	
16	Sample Household Number	1	15	2	36	37	
17	Person Serial No.	4	1	2	38	39	
19	Relationship To Head	4	4	1	40	40	
20	Sex	4	5	1	41	41	
21	Age	4	6	3	42	44	
22	Marital Status	4	7	1	45	45	
23	General Educaion Level	4	8	2	46	47	
24	Technical Educaion Level	4	9	2	48	49	
25	No. of years in Formal Education	4	10	2	50	51	
26	Status of Current Attendance in Educational Institution	4	11	2	52	53	
27	Status Code for activity 1	6	4/3.1	2	54	55	
28	Industry Code (NIC) for activity 1	6	5/3.1	2	56	57	
29	hours actuallly worked for activity 1 on 7 th day	6	6/3.1	2	58	59	
30	wage earning for activity 1 on 7 th day	6	9/3.1	5	60	64	
31	Status Code for activity 2	6	4/3.1	2	65	66	
32	Industry Code (NIC) for activity 2	6	5/3.1	2	67	68	
33	hours actuallly worked for activity 2 on 7 th day	6	6/3.1	2	69	70	
34	wage earning for activity 2 on 7 th day	6	9/3.1	5	71	75	
35	total hours actually worked on 7th day	6	7/3.1	2	76	77	
36	hours available for aditional worked on 7th day	6	8/3.1	2	78	79	

Figure 2.1: Example of PLFS Data Layout

.

For each Quarter, following values are calculated and kept at the end of each record:

- NSS (3 bytes) = number of first stage units surveyed within sector x state x stratum x substratum for the sub-sample in a Second Stage stratum
- NSC (3 bytes) = number of first stage units surveyed within a sector x state x stratum x substratum for combined sub-samples in a Second Stage stratum
- MLTS (10 bytes) = weight or multiplier (in two places of decimal) calculated at the level of Second Stage Stratum (SSS) In the value fields (in Rs.) the numeric figure is given in whole number including negative values wherever applicable. All records of a hg/sb x second stage stratum of a particular first stage unit (FSU) will have same weight.

2.2.1 Generation of combined estimate for the entire Year

For generating combined estimate (taking both the subsamples together), weights may be applied as follows: Final weight = MLTS/100 if NSS=NSC = MLTS/200 otherwise. Generation of combined estimate for the entire Year: For annual estimate, MLTS may be divided by number of quarters (number of times a particular sector x state x stratum x substratum contributes in the year in terms of surveyed FSUs).

2.3 Estimation of Population

For estimating the population of India ,Kerala , UttarPradesh , Goa . The necessary step is to filter those states from the data using their states code The states codes assigned for Kerala , UttarPradesh , Goa in the PLFS respectively is 32,09 &30 The estimation of the population is the sum of the final weights that are assigned . process ensures that the final results are more representative of the population. For example, if a respondent has a weight of 200, their responses count as if two hundred identical respondents had answered the survey.

2.3.1 Estimation of Urban & Rural Population

For estimating the sector-wise population we need to filter the data again according to the sector coloumn given in the data , The labels are given as Rural=1 , Urban=2

State	Rural	Urban
Goa	561208	802155
Uttarpradesh	150971213	37185512
Kerala	17431634	15222857
All India	898622671	324575661

Table 2.1: Estimated Population

2.3.2 Estimation of Gender-wise population

For estimating the Genderwise population , The data should be filtered according to the colomn 'Sex' , The labels are given as Male=1 , Female=2

State	Male	Female
Goa	673360	690003
Uttarpradesh	95417375	92736535
Kerala	15543234	17111258
All India	629557390	593615570

Table 2.2: Estimated Population

2.4 Estimation of Worker Population Rate

Worker Population Ratio (WPR) is defined as the ratio of the total number of workers in a country to the total population, multiplied by 100 , For estimating the worker population rate . The data is filtered again according to the coloumns , Status.Code , Status.Code1,

Whether Engaged in any Subsidiary Work Capacity . For estimating the employ population The coloumns are defined as ps ,ss ,sc like principle status , secondary status , subsidiary capacity , The employ population is estimated using the subset function , where the activity code related to teh employed person is ps¡=51 and ss¡=51 . The WPR is found out by using the equation

$$WPR = (Populationofemployed/TotalPopulation) * 100 \tag{2.1}$$

State	Urban		Rural	
	Male	Female	Male	Female
Kerala	53.51	19.2	57.86	30.91
Uttarpradesh	51.48	9.53	53.73	24.74
Goa	56.1	21.04	52.61	17.71
All India	55.58	18.73	62.8	20.49

Table 2.3: Estimated WPR(2022 23)

State	Urban		Rural	
	Male	Female	Male	Female
Kerala	52.56	18.3	56.84	29.25
Uttarpradesh	50.74	9.25	51.51	20.6
Goa	51.64	13.97	55.4	13.1
All India	54.95	17.29	61.9	19.19

Table 2.4: Estimated WPR(2021-22)

State	Urban		Rural	
	Male	Female	Male	Female
Kerala	49.69	18.3	54.5	24.94
Uttarpradesh	51.32	8.86	51.13	17.91
Goa	51.67	17.13	48.12	23.14
All India	54.54	16.86	61.64	19.39

Table 2.5: Estimated WPR(2020-21)

State	Urban		Rural	
	Male	Female	Male	Female
Kerala	50.8	19.3	53.7	25.3
Uttarpradesh	50.2	9	49.9	13.3
Goa	54.6	21.3	57.5	17.9
All India	54.1	16.8	53.8	24

Table 2.6: Estimated WPR(2019-20)

State	Urban		Rural	
	Male	Female	Male	Female
Kerala	53.4	19.7	54.2	21.1
Uttarpradesh	45.8	6.9	47.5	10.5
Goa	54.9	21.7	50.7	18.3
All India	52.7	14.5	52.1	19

Table 2.7: Estimated WPR(2018-19)

State	Urban		Rural	
	Male	Female	Male	Female
Kerala	48.55	14.5	51.57	16.37
Uttarpradesh	48.57	7.78	46.65	9.09
Goa	51.05	17.53	55.77	15.018
All India	52.85	13.65	53.68	13.67

Table 2.8: Estimated WPR(2017-18)

2.5 Estimating Unemployment Rates

Unemployment Rates are defined as the ration of the total number of unemployed persons in a country to the sum of the Number of unemployed persons and employed person multiplied by 100

$$unemploymentrate = \frac{No:ofunemployedpersons * 100}{No:ofemployedpersons + No:ofunemployedpersons} \quad (2.2)$$

The Unemployment rates are found out seperately for the states Kerala , UttarPradesh, Goa and for All India among all the age groups

State	Male		Female	
	Urban	Rural	Urban	Rural
Kerala	5.67	4.73	13.13	17.66
Uttarpradesh	7.35	1.90	8.74	0.86
Goa	5.58	8.73	11.80	17.66
All India	7.07	2.36	7.63	2.66

Table 2.9: Estimated UR(2022 23)

State	Male		Female	
	Urban	Rural	Urban	Rural
Kerala	7.35	6.92	15.38	12.39
Uttarpradesh	9.32	2.47	8.33	0.96
Goa	7.25	10.71	12.78	19.04
All India	9.005	3.35	7.97	2.93

Table 2.10: Estimated UR(2021-22)

State	Male		Female	
	Urban	Rural	Urban	Rural
Kerala	7.83	6.40	17.65	13.42
Uttarpradesh	13.19	3.82	10.85	1.47
Goa	5.17	7.59	13.02	15.62
All India	8.97	3.42	7.60	2.85

Table 2.11: Estimated UR(2020-21)

State	Male		Female	
	Urban	Rural	Urban	Rural
Kerala	7.5	7.3	16.7	13.8
Uttarpradesh	8.5	3.8	10.2	1.1
Goa	7.1	5.7	11.6	12.5
All India	6.4	4.5	8.9	2.6

Table 2.12: Estimated UR(2019-20)

State	Urban		Rural	
	Male	Female	Male	Female
Kerala	5.2	4.7	18.8	15.6
Uttarpradesh	11.2	4.8	6.1	1.8
Goa	7.1	5.7	11.6	12.5
All India	6.4	4.5	8.9	2.6

Table 2.13: Estimated UR(2018-19)

State	Male		Female	
	Urban	Rural	Urban	Rural
Kerala	9.39	6.77	6.98	10..35
Uttarpradesh	25.52	6.21	10.17	1.73
Goa	6.48	8.16	6.98	10.35
All India	16.66	5.8	13.21	4.65

Table 2.14: Estimated UR(2017-18)

2.6 Estimating Labour Force Participation Rate

Labour Force Participation rate is defined as the ratio of sum of employed and unemployed persons to the Total population

$$LFPR = \frac{No : of employed persons + No : of unemployed persons}{Total Population} * 100 \tag{2.3}$$

LFPR is found out seperately for the states Kerala , Goa , Uttarpradesh and All India level for all the age groups

State	Urban		Rural	
	Male	Female	Male	Female
Kerala	56.73	28.05	60.74	34.06
Uttarpradesh	55.56	10.44	54.77	24.95
Goa	59.42	23.86	57.65	21.51
All India	59.81	20.28	64.4	21.05

Table 2.15: Estimated LFPR(2022 23)

State	Urban		Rural	
	Male	Female	Male	Female
Kerala	56.73	27.35	61.06	33.39
Uttarpradesh	55.95	10.09	52.82	20.8
Goa	55.68	16.02	62.05	16.19
All India	60.39	18.78	64.05	19.77

Table 2.16: Estimated LFPR(2021-22)

State	Urban		Rural	
	Male	Female	Male	Female
Kerala	53.91	24.86	58.23	28.81
Uttarpradesh	59.12	9.94	53.16	18.18
Goa	54.49	19.70	52.07	27.43
All India	59.92	18.25	63.82	19.91

Table 2.17: Estimated LFPR(2020-21)

State	Urban		Rural	
	Male	Female	Male	Female
Kerala	54.9	23.2	57.9	29.4
Uttarpradesh	54.9	10.1	51.9	13.5
Goa	58.8	24.1	61	20.4
All India	57.8	18.5	56.3	24.7

Table 2.18: Estimated LFPR(2019-20)

State	Urban		Rural	
	Male	Female	Male	Female
Kerala	56.3	24.2	61	20.4
Uttarpradesh	51.6	7.3	49.9	10.7
Goa	59	25.4	51.9	22.8
All India	56.7	16.1	55.1	19.7

Table 2.19: Estimated LFPR(2018-19)

State	Urban		Rural	
	Male	Female	Male	Female
Kerala	53.59	20.61	55.32	20.9
Uttarpradesh	65.21	8.66	49.75	9.25
Goa	54.59	18.84	60.73	16.75
All India	63.41	15.73	56.99	14.34

Table 2.20: Estimated LFPR(2017-18)

Chapter 3

DATA VISUALISATION

3.1 Representation of Population Proportion

Gender-wise

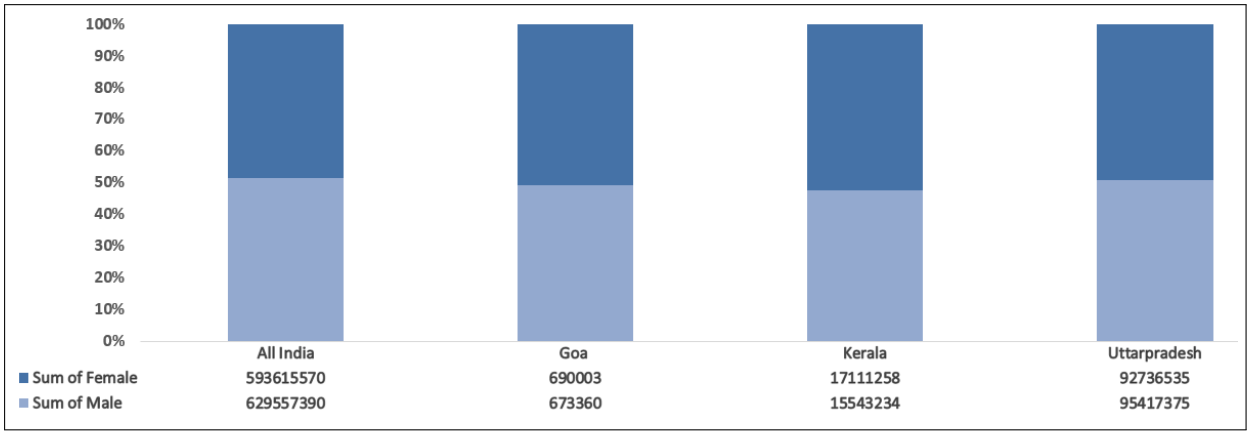


Figure 3.1: Population Proportion (Gender-wise)

All India (51% Male / 49% Female): The population is slightly skewed towards males, with 51% of the population being male and 49% being female. This indicates a nearly balanced gender distribution, with a minor male majority.

Kerala(48% Male / 52% Female): Kerala has a slight female-majority population, with 52% of the population being female and 48% being male.

Goa (49% Male / 51% Female): Similar to Kerala , Goa also has a slight female majority, with 51% females and 49% males. The gender distribution here is nearly balanced but still leans towards a higher female population.

UttarPradesh(51% Male / 49% Female): Uttarpradesh with a slight male majority, comprising 51% males and 49% females. This indicates a marginally higher male population but overall a balanced gender distribution.

Sector-wise

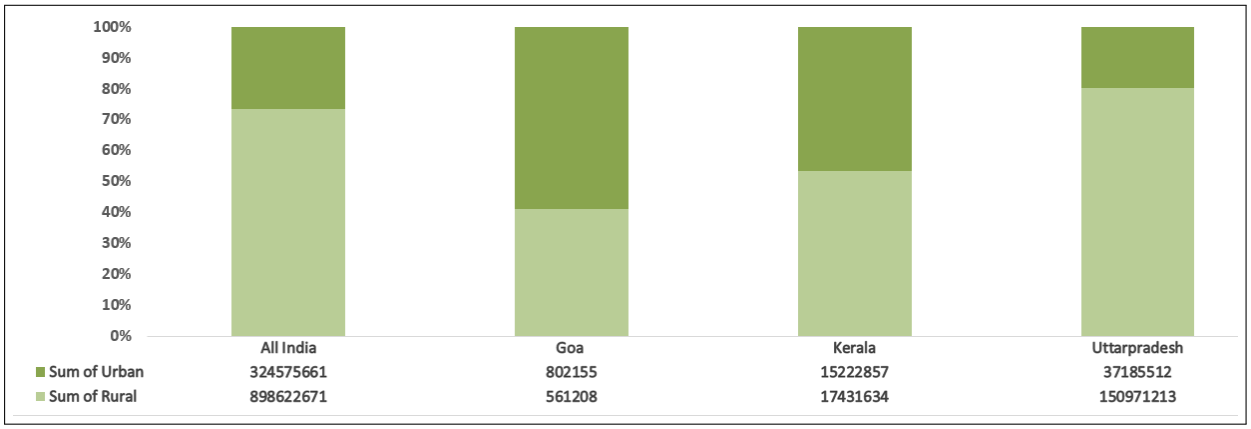


Figure 3.2: Population Proportion(Sector-wise)

All India(27% Urban / 73% Rural): The population is predominantly rural, with 73% of the population living in rural areas and only 27% in urban areas. This indicates a significant rural majority.

Kerala (47% Urban / 53% Rural): a relatively balanced population distribution, with a slight rural majority. Here, 53% of the population resides in rural areas, while 47% are in urban areas.

Goa (59% Urban / 41% Rural): Goa is primarily urban, with 59% of its population living in urban areas and 41% in rural areas. This indicates a noticeable urban majority.

Uttarpradesh (20% Urban / 80% Rural): Uttarpradesh shows a strong rural majority, with 80% of the population living in rural areas and only 20% in urban areas. This highlights a significant rural dominance in this region.

All regions have close to equal gender proportions, with none showing a significant gender imbalance. This suggests a fairly equitable distribution of males and females across these regions.The population of Uttarpradesh and All India strong rural majority, with 73% and 80% of their populations living in rural areas, respectively.and Goa has a clear urban majority, with 59% of its population residing in urban areas.

3.2 Labour Force participation Rate

All India

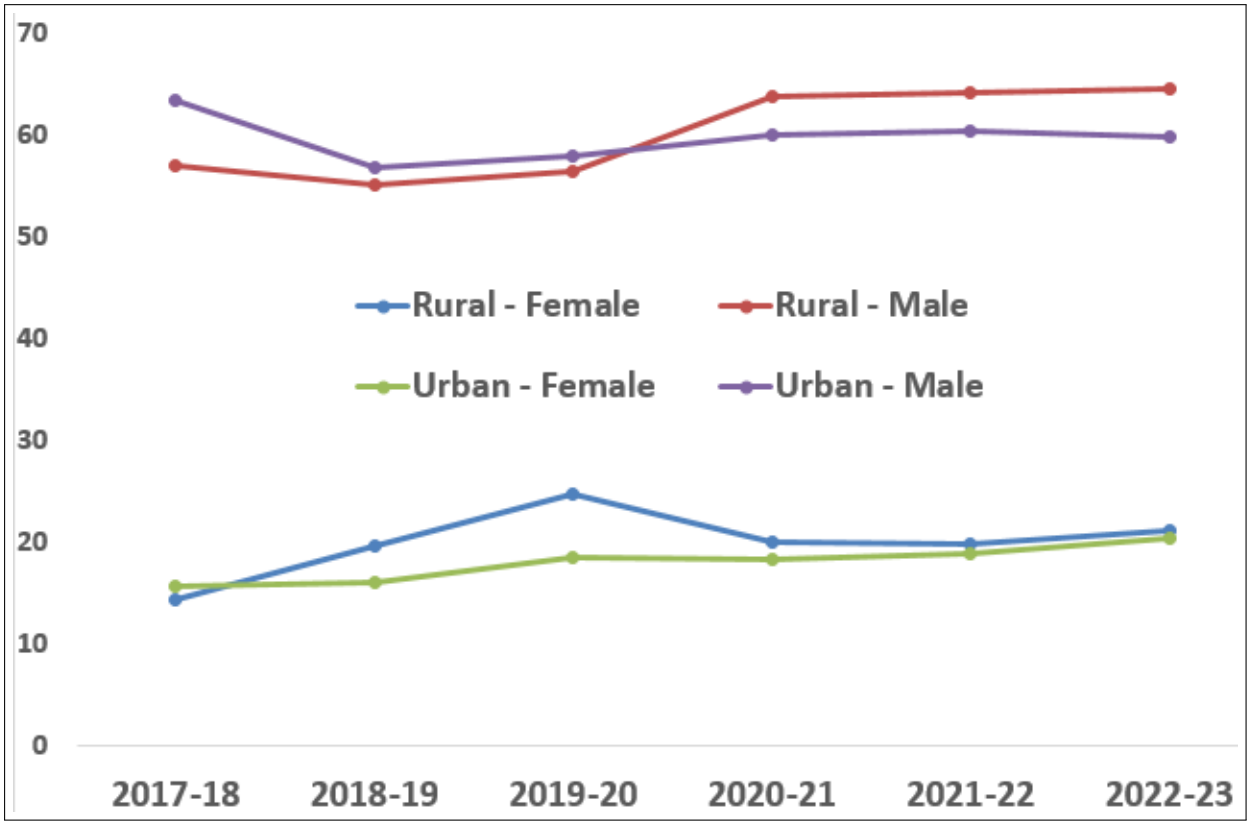


Figure 3.3: LFPR All India

Both males and females in rural areas show an upward trend in labor force participation, with males having higher and more stable LFPRs compared to females. Females in urban areas have a consistent upward trend, while males show recovery from an initial decline and stabilization. This suggests improving conditions for females in urban labor markets and a resilient, although fluctuating, participation for males.

Kerala

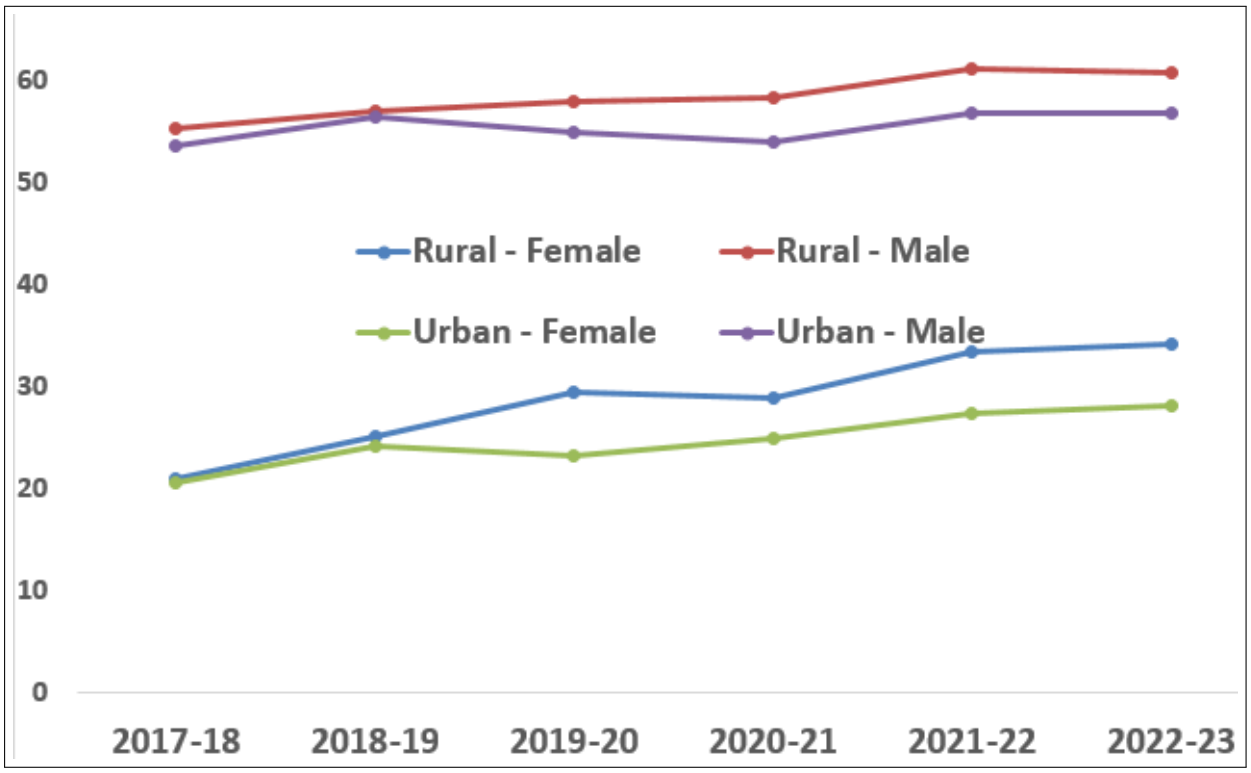


Figure 3.4: LFPR Kerala

Both males and females in urban areas show an upward trend in labor force participation, with females exhibiting a stronger growth rate. This suggests a dynamic and expanding urban labor market with increasing female participation.Females in rural areas show a positive trend with some fluctuations, indicating improving but variable conditions. Rural males have a stable LFPR with minor fluctuations, indicating a consistent rural labor market.

Goa

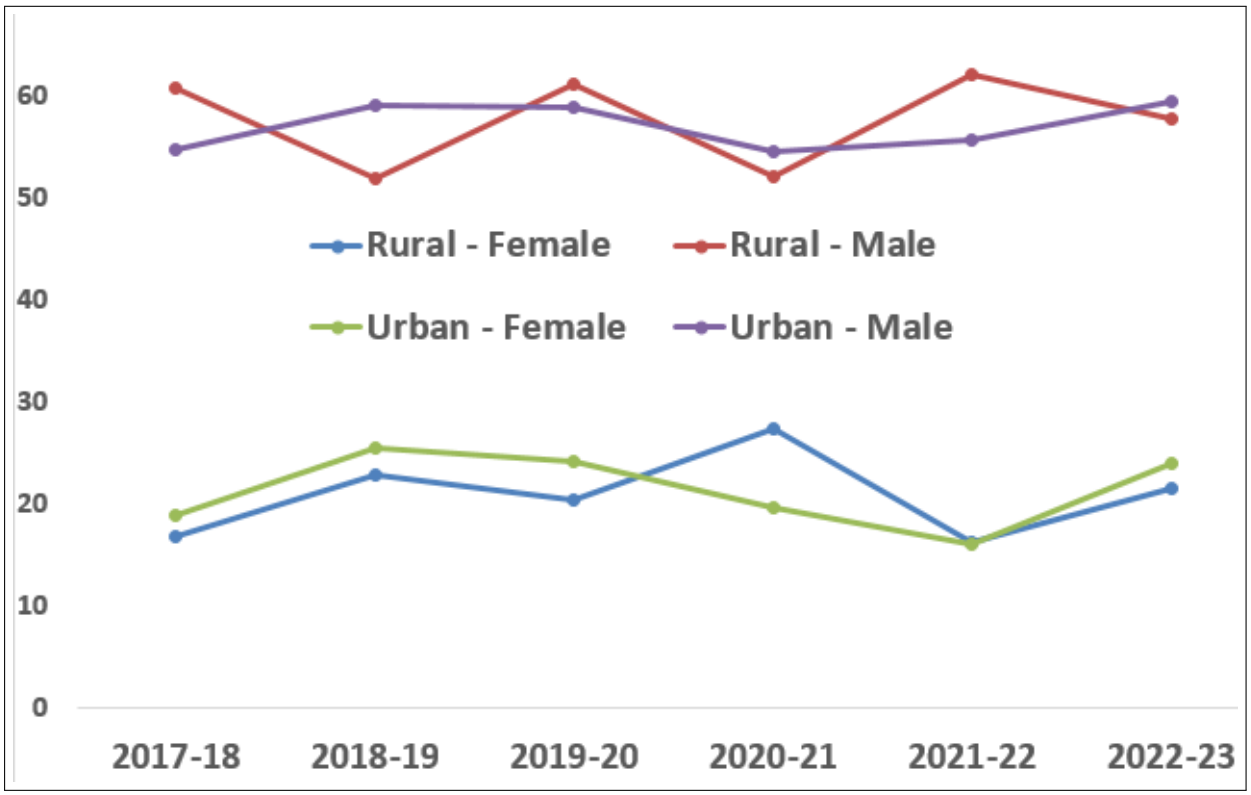


Figure 3.5: LFPR Goa

The male labor force in rural is consistently high but variable, indicating strong engagement with periodic fluctuations,while the rural female labor force is highly variable, indicating instability and sensitivity to external factors. The urban male labor force is stable with minor fluctuations, suggesting resilience and adaptability. female labour force, while increasing initially, shows a decline and partial recovery, highlighting challenges in achieving steady participation.

UttarPradesh

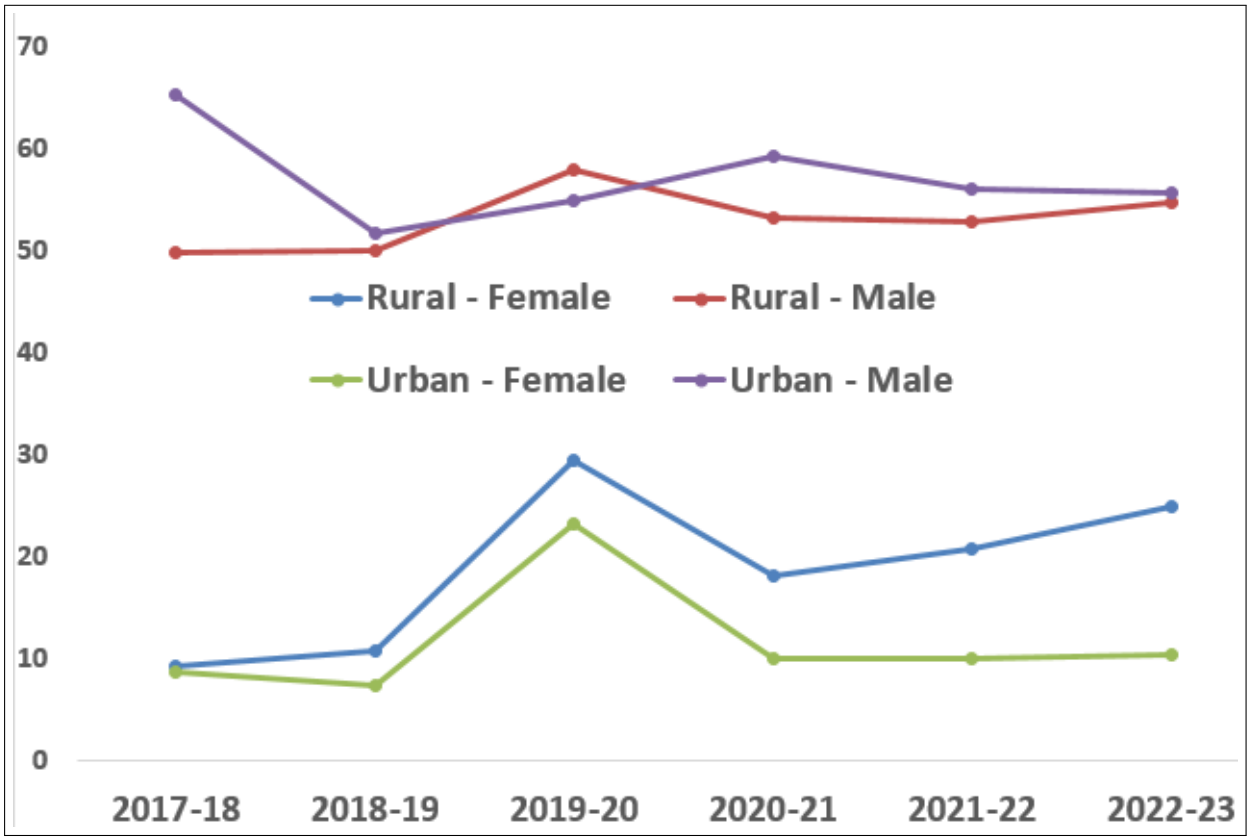


Figure 3.6: LFPR UP

Both male and female labour force in rural areas show fluctuating participation rates, with females experiencing more dramatic changes. This indicates a less stable labor market for rural populations, especially for females.

Urban males display a general decline followed by recovery, showing some resilience in the labor market. Urban females, however, show extreme variability, indicating less stable employment conditions and possibly more sensitivity to economic or policy changes.

3.3 Worker Population Rate

All India

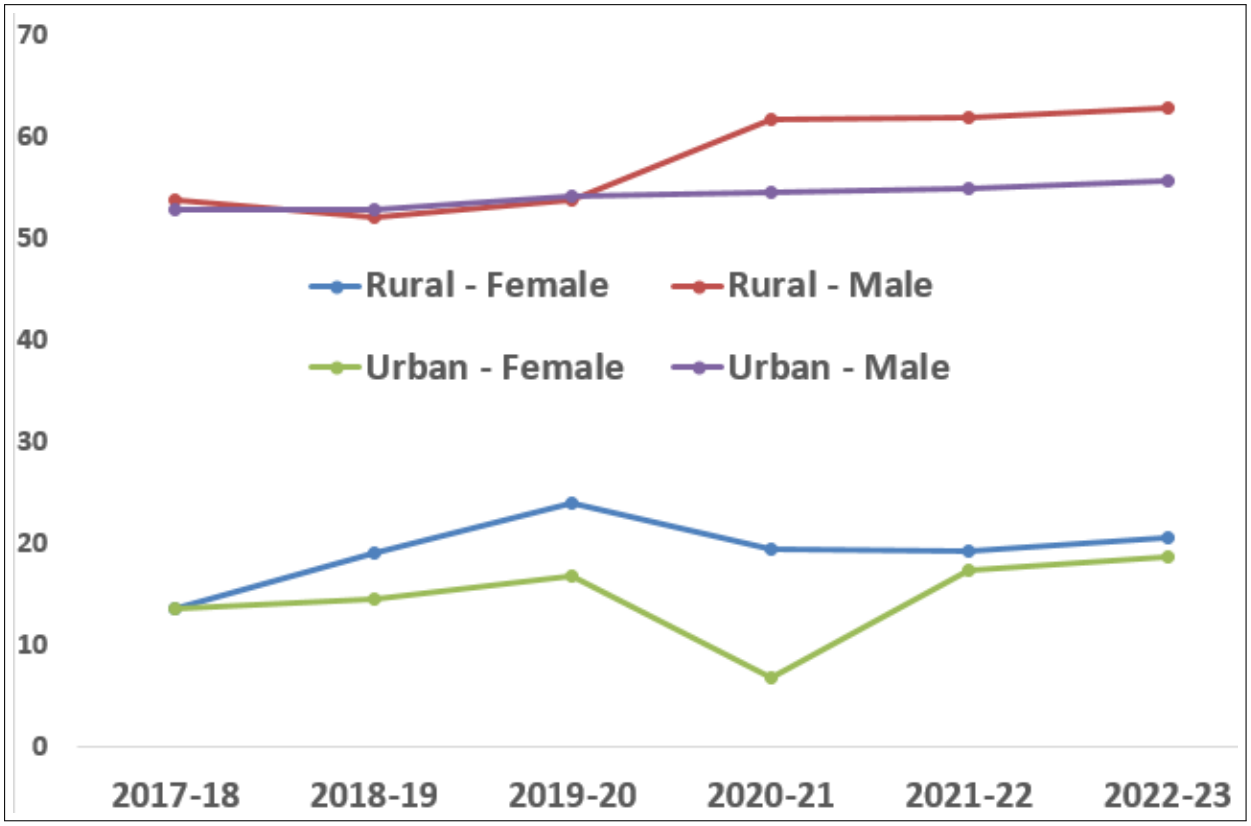


Figure 3.7: WPR All India

Males labour force participation in Rural Areas exhibit a strong and increasing WPR, indicating robust labor market participation. Rural females show a gradual improvement but remain with lower WPR values, suggesting ongoing challenges in increasing their labor market engagement. Urban Areas: Urban males have a stable and gradually increasing WPR, indicating consistent labor market involvement. Urban females show more variability, with significant drops and recoveries, suggesting sensitivity to changes in employment conditions.

Kerala

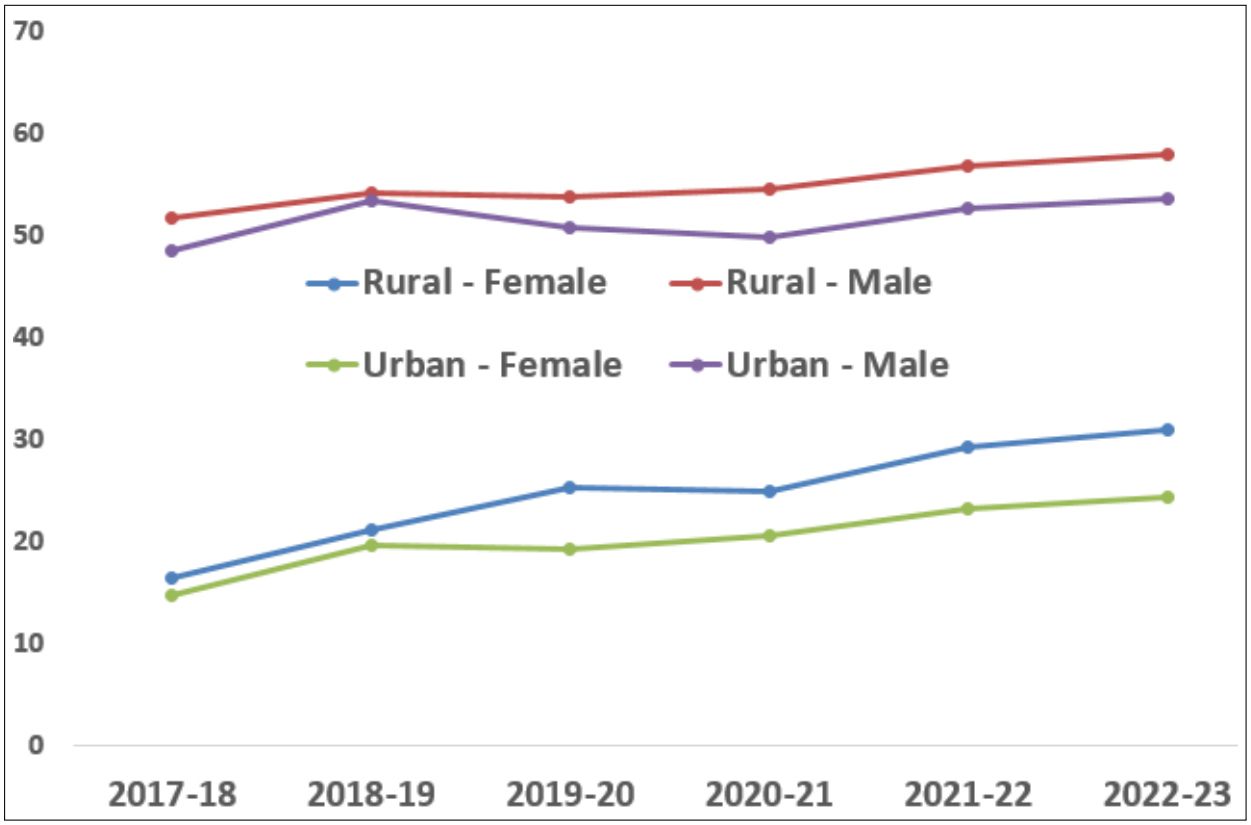


Figure 3.8: WPR Kerala

Both males and females in rural area show an upward trend in WPR, with females demonstrating a steady increase and males showing gradual improvement. This indicates positive changes in labor market participation in rural areas. Urban Areas both male and female show upward trends in WPR. Urban females have a steady increase, while urban males experience some fluctuation but overall improvement. This suggests a growing labor market engagement for both groups in urban settings.

Goa

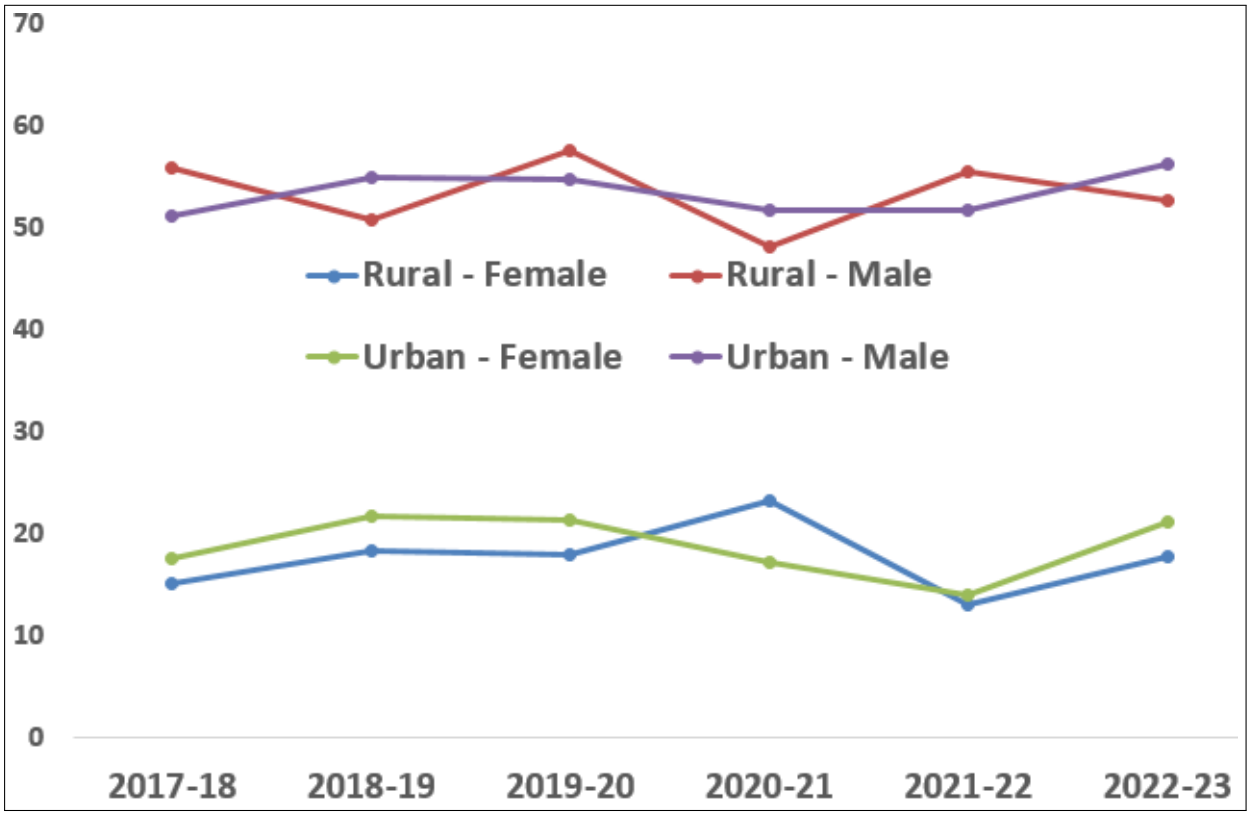


Figure 3.9: WPR Goa

Rural females exhibit significant variability in WPR, indicating instability in their labor market participation. while males show fluctuations but generally maintain a higher and more stable WPR. Females in urban areas experience variability with notable peaks and drops, suggesting sensitivity to changing conditions. Urban males show stability with a gradual increase in WPR, reflecting a more consistent labor market engagement.

UttarPradesh

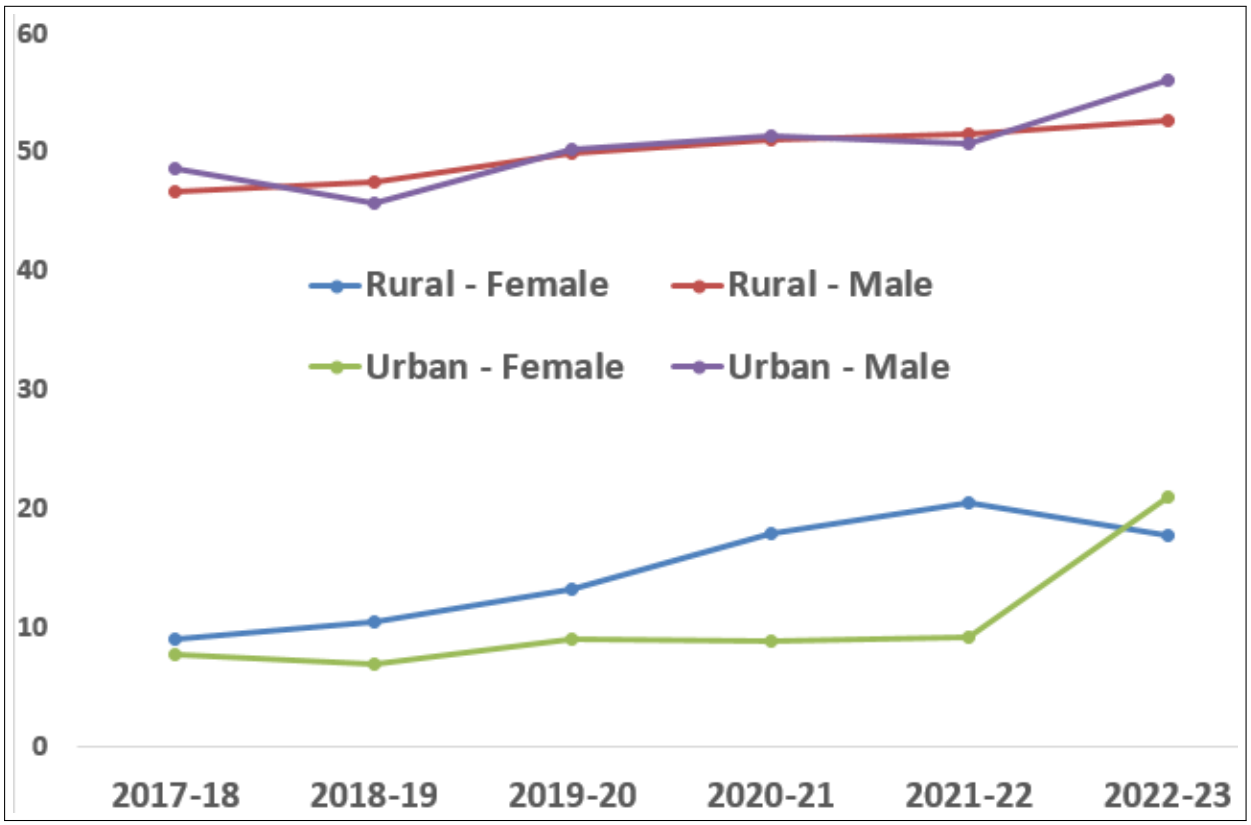


Figure 3.10: WPR Uttarpradesh

In Rural Areas males show a steady increase in WPR, reflecting consistent improvements. females also show an overall increase but with some instability, indicating positive changes in participation mixed with ongoing challenges. Urban females exhibit notable variability with a significant peak at the end, reflecting substantial improvements in participation. Urban males show a general upward trend with some fluctuations, indicating improving conditions in the labor market.

3.4 Unemployment Rate

All India

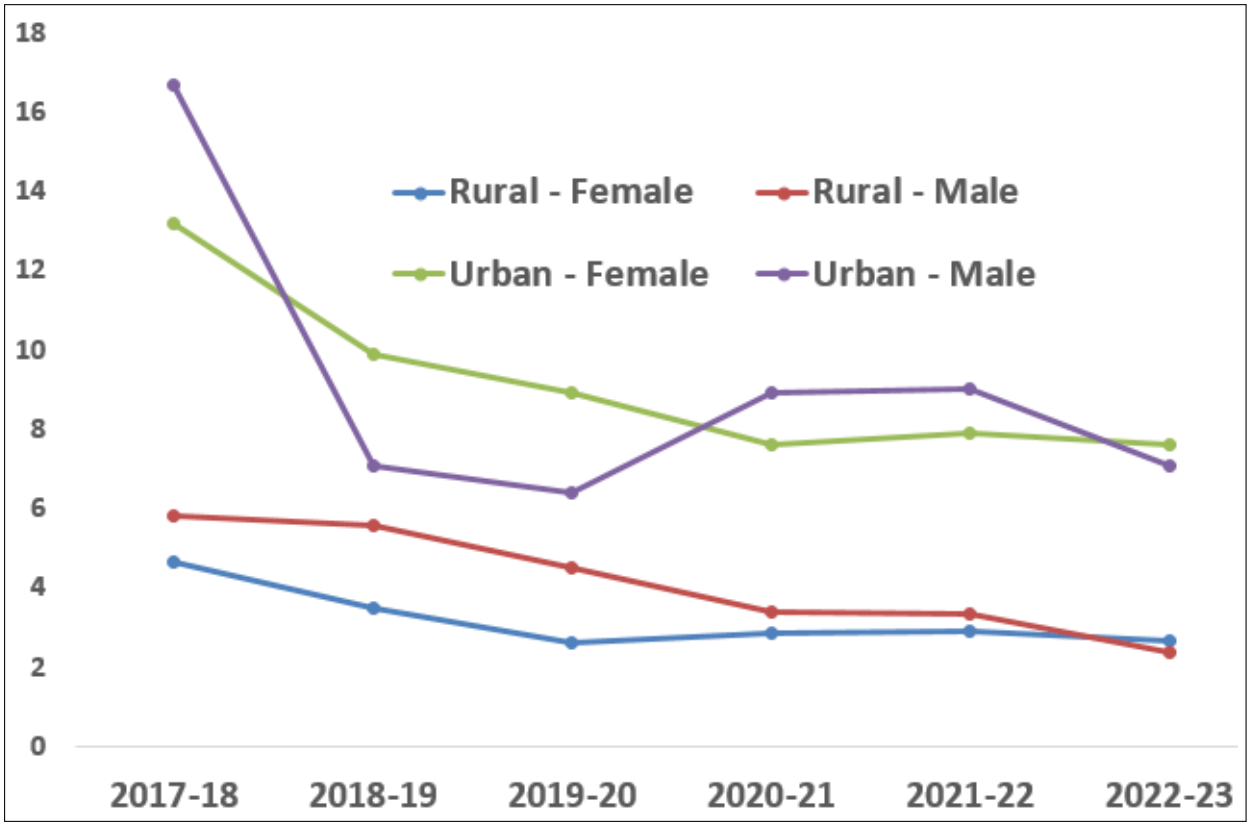


Figure 3.11: UR All india

Both male and female in rural areas experience decreasing unemployment rates, with females having lower and more stable rates compared to males. This suggests improving employment conditions in rural areas.In Urban areas females have fluctuating but relatively high unemployment rates, reflecting ongoing employment challenges. Urban males show significant fluctuations but an overall downward trend, indicating some improvement in employment conditions

Kerala

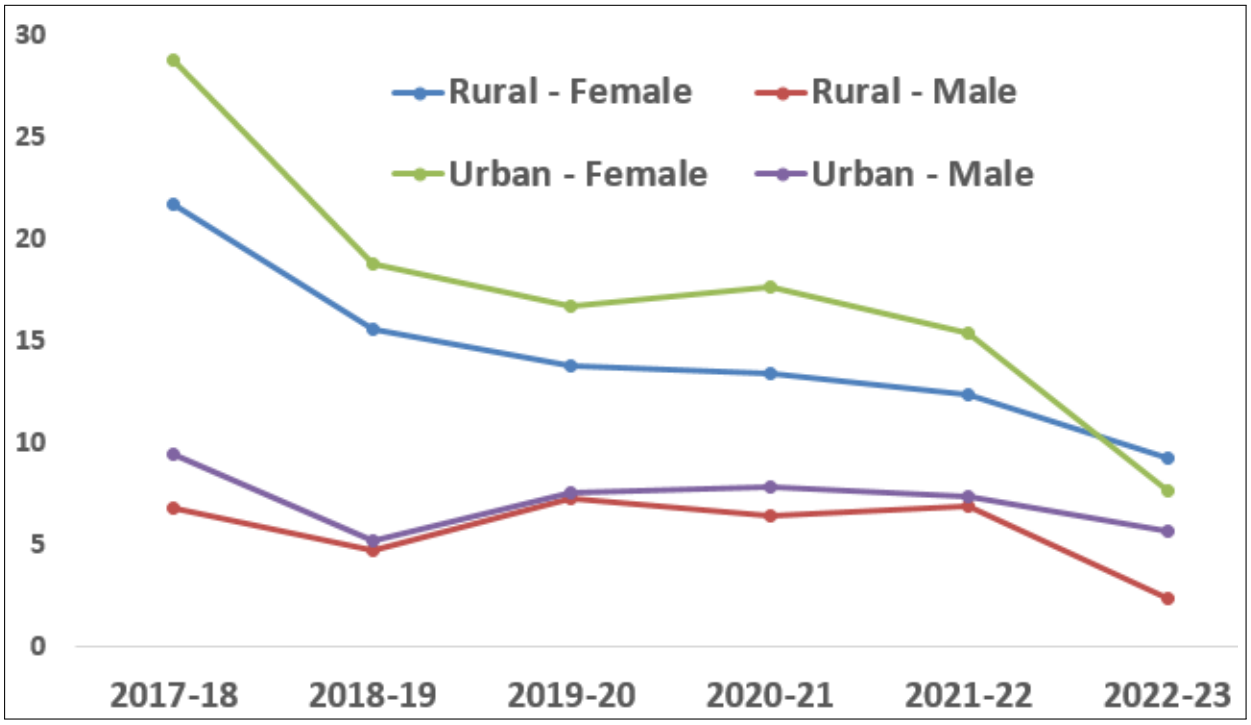


Figure 3.12: UR Kerala

Both male and female in rural areas exhibit a decrease in unemployment rates, with rural females experiencing a more pronounced improvement. The data suggests that rural areas have seen substantial progress in employment conditions for both genders. Urban females have experienced a significant decrease in unemployment rates, showing substantial improvements in employment conditions. Urban males also show improvements but with less dramatic changes compared to females.

Goa

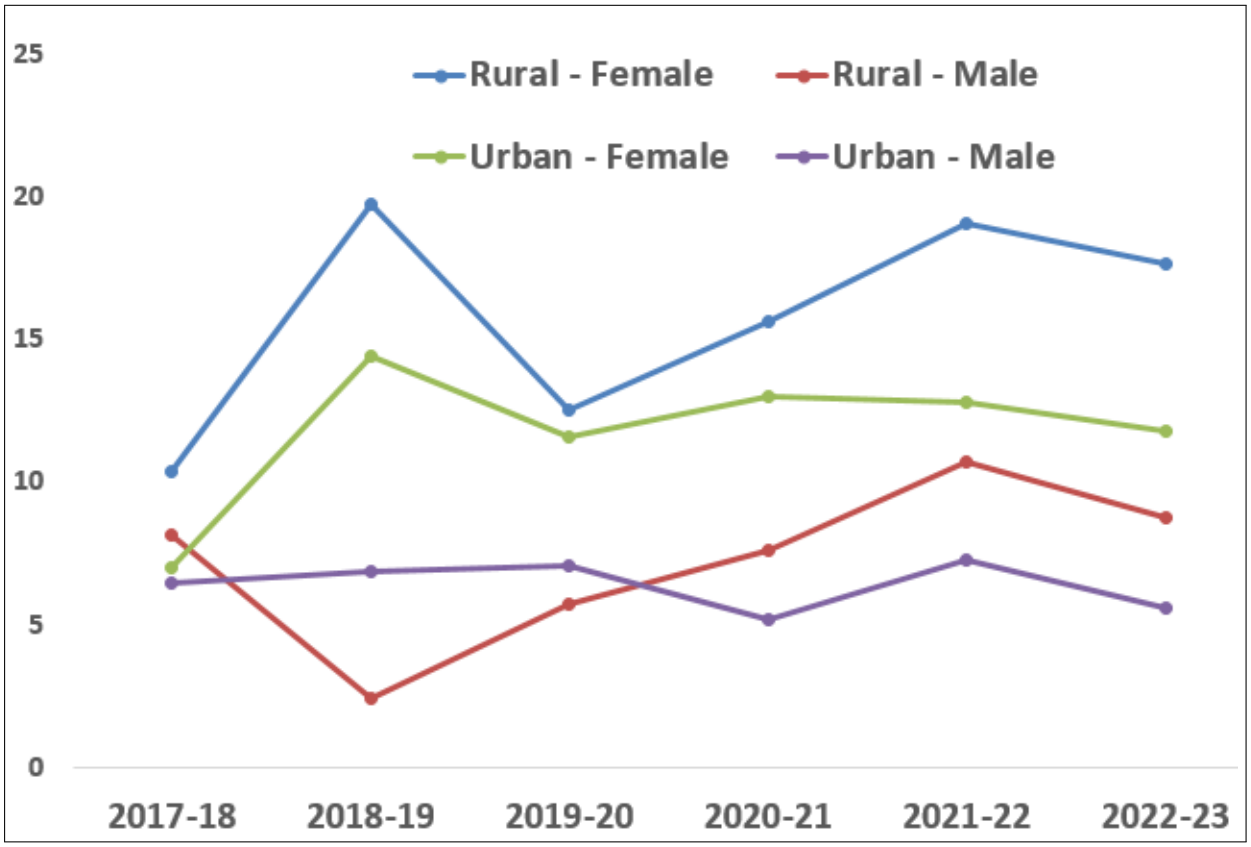


Figure 3.13: UR Goa

Both rural females and males show an upward trend in unemployment rates, reflecting potential challenges and deteriorating employment conditions in rural areas. Urban females experience a decreasing trend in unemployment rates, suggesting improved employment conditions. Urban males show stable and slightly decreasing unemployment rates, indicating relatively stable employment conditions.

Uttarpradesh

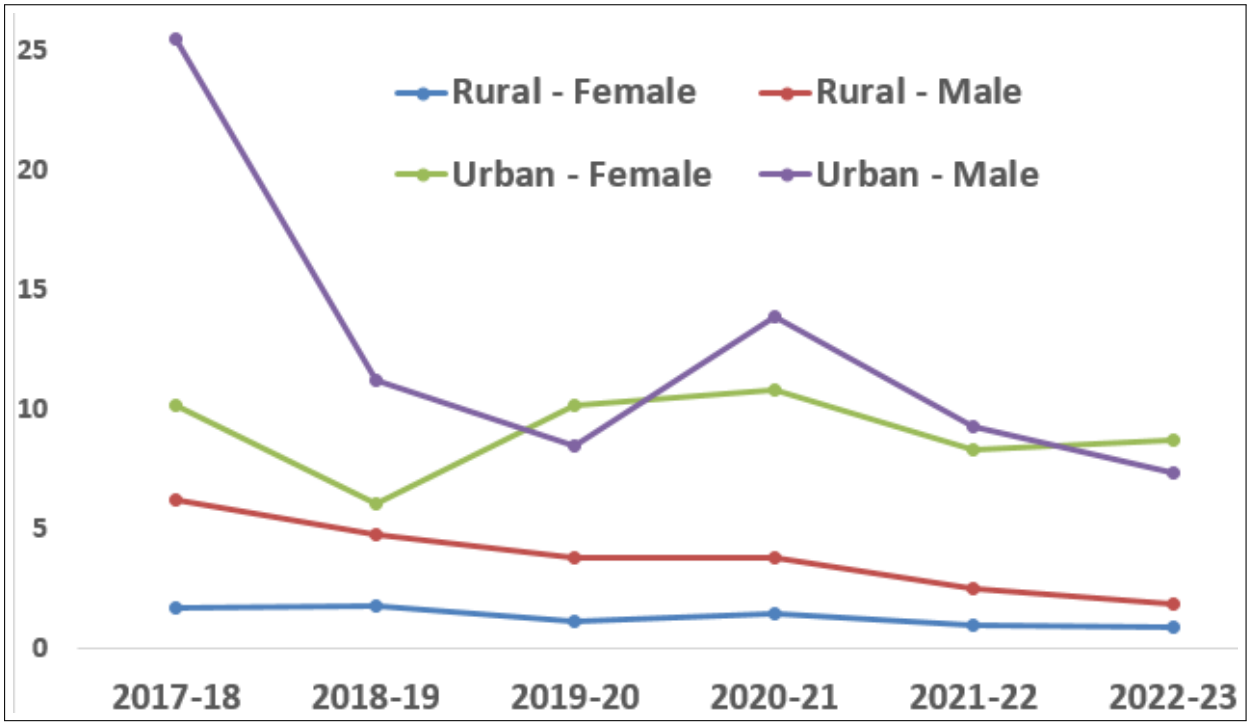


Figure 3.14: UR Uttarpradesh

Both rural females and males experience decreasing unemployment rates, with females having lower and more stable rates compared to males. This suggests improving employment conditions in rural areas.while females in urban areas have fluctuating but relatively high unemployment rates, reflecting ongoing employment challenges Males show significant fluctuations but an overall downward trend, indicating some improvement in employment conditions.

Chapter 4

DATA ANALYSIS

4.1 Comparative Analysis

Comparison of Gender-wise Unemployment Rates among different sectors(2017-2023)

Urban-Male

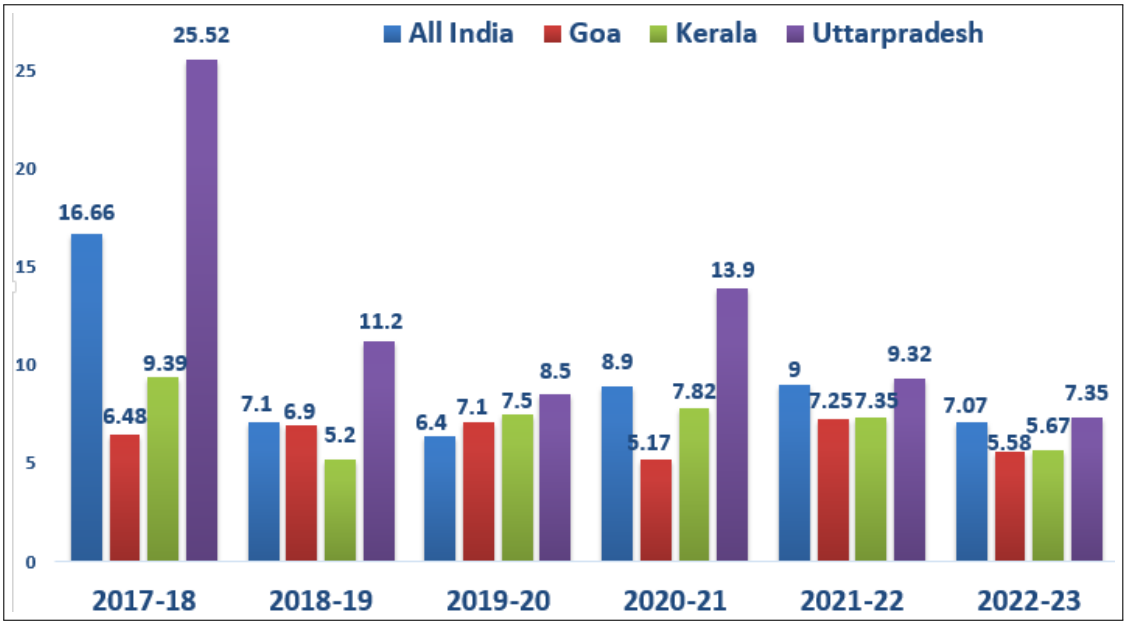


Figure 4.1: Urban Male

The national unemployment rate among male in urban areas shows a fluctuating trend with a peak in 2017, followed by a decrease in 2018 and 2019. There is a noticeable increase in 2020, likely due to the COVID-19 pandemic, followed by a slight decrease in 2021 and a further decrease in 2022. Uttar Pradesh consistently has the highest unemployment rates among the states, with significant fluctuations and a high peak in 2017. Goa has the lowest and most stable unemployment rates, showing resilience and stability in its job market. Kerala's unemployment rates are lower than the national average, with noticeable improvements over time.

Urban Female

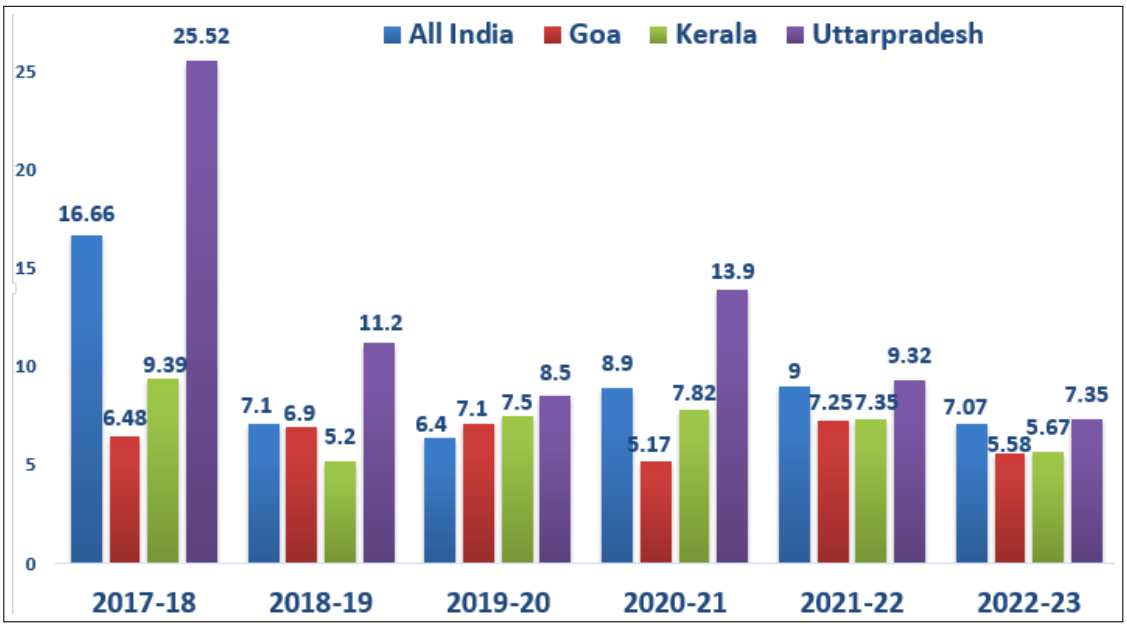


Figure 4.2: Urban Female

The unemployment rate for urban females at the national level shows a steady decrease from 13.21% in 2017 to 7.63% in 2022.Kerala had the highest unemployment rates for urban females in 2017 but saw a substantial decrease by 2022. Goa had the lowest unemployment rates in 2017 but experienced significant fluctuations before stabilizing in recent years. All India and Uttar Pradesh show moderate unemployment rates with general improvement over time

Rural Male

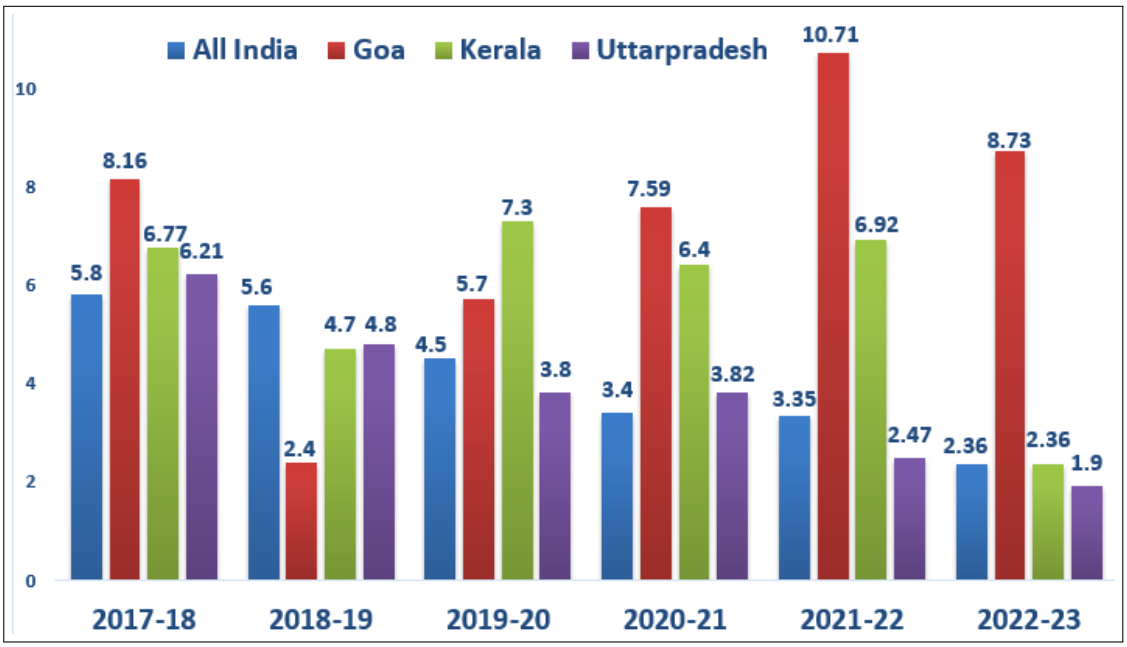


Figure 4.3: Rural Male

All regions except for Goa show a general declining trend in rural male unemployment rates over the period 2017-2022 Goa and Kerala exhibit more fluctuations in their unemployment rates compared to the relatively steady decline seen in All India and Uttar Pradesh. Kerala and Uttar Pradesh experienced significant drops in unemployment rates by 2022, indicating potential improvements in the rural labor market conditions in these regions.

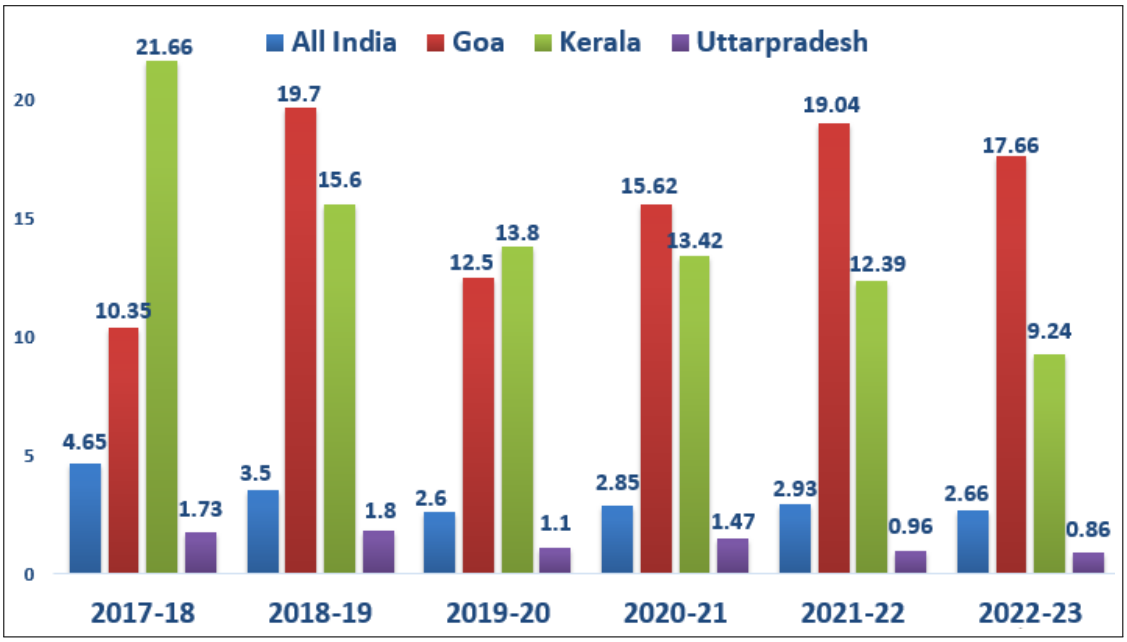


Figure 4.4: Rural Female

The unemployment rate for rural females at the national level shows a general downward trend from 4.65% in 2017 to 2.66% in 2022. Kerala had the highest unemployment rates for rural females in 2017 but saw substantial improvement by 2022. Uttar Pradesh consistently had the lowest and most stable unemployment rates. Nationwide Unemployment Rates shows a steady decrease in unemployment rates, indicating general improvements, while Goa's rates fluctuated significantly, indicating volatility and challenges.

Chapter 5

FIELD REPORT

Scheme:ASUSE

Area:Arpora Village Panchayath , North Goa

Survey Enumerator:Mr. Prajyot Parab

About Survey:

The Annual Survey of Unincorporated Sector Enterprises (ASUSE) is conducted by the Ministry of Statistics and Programme Implementation (MoSPI) in India to capture the economic and operational characteristics of unincorporated non-agricultural establishments in sectors like manufacturing, trade, and other services (excluding construction).ASUSE covers rural and urban areas across India, excluding difficult-to-access villages in the Andaman and Nicobar Islands. It includes unincorporated non-agricultural establishments under proprietorship, partnership (excluding LLPs), Self-Help Groups, cooperatives, and societies/trusts in the sectors of manufacturing, trade, and other services.The survey follows a multi-stage stratified sampling scheme with census villages in rural areas (Panchayat wards in rural Kerala) and UFS (Urban Frame Survey) blocks in urban areas as first stage units, and establishments as ultimate stage units. Large FSUs undergo an intermediate stage of sampling, with hamlet groups in rural areas and sub-blocks in urban areas.In ASUSE 2021-22, data were collected from 4,16,269 establishments (2,39,981 in rural and 1,76,288 in urban) across 16,199 FSUs (8,425 in rural and 7,774 in urban). In ASUSE 2022-23, data were collected from 4,58,938 establishments (2,58,296 in rural and 2,00,642 in urban) across 16,382 FSUs (8,495 in rural and 7,887 in urban).Data collection was based on an area frame, with selected establishments primarily providing data through oral enquiries for a monthly reference period, while larger establishments provided annual data from audited accounts. ASUSE 2021-22 used Pen-and-Paper Personal Interviews (PAPI), while ASUSE 2022-23 used Computer-Assisted Personal Interviews (CAPI).

Activities

On the date of 18-06-2024 and 20-06-2024, A field visit was scheduled to participate in the Asuse survey on the area of Arpora Village in Goa along with Field Investigator Mr. Prajyot Parab .Arpora Village panchayath is located 8km from Porvorim.The village consisits of 9 wards.

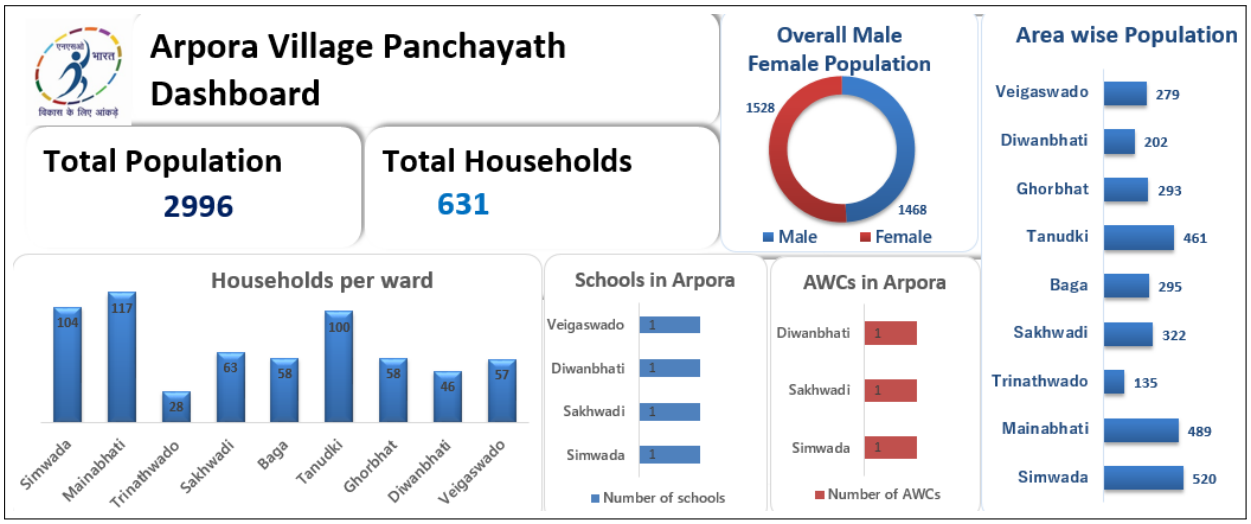


Figure 5.1: Some demographic details of Arpora Village (as per 2011 census)

On the first day. Some official proceedings were done . Providing letter to the Panchayath office, Police station and collection of some details regarding Ward using Village Map and census data obtained from Panchayath.After that a rough Map of the Panchayath is prepared to get the picture of the geography.Then Hamlets are labelled.Hamlet formation was done with the help of CAPI software as the estimated population was feeded as 3700.A total of 10 hamlets were needed to be formed.Since there was only 9. The whole "Diwanbhatti" area were divided into two since that was the area with the largest Population.Next step was Listing of the establishments in which was conducted on 20-06-24.Starting from the North-West Corner in a serpentile form.Listing of all the structures were done properly.Some Questions were asked to the enterprises in such a way that maximum information can be collected. example questions Household/Shop NumberName and Address,Description of Activity,Type of Ownership,Broad Activity Code

Scheme : Urban Frame Survey

Area : Mormugao,Vasco Da Gama

Supervisor : Rupali Karne , ISS

Survey Enumerator : Mr. Sarvesh

About Survey:

The National Sample Survey Office (NSSO) conducts all-India large-scale sample surveys on various socio-economic indicators using a stratified multi-stage sampling design. Most surveys adopt a household approach for data collection. Since creating a new frame for households each time is impractical, sampling is designed to select households in successive stages.

Sampling Frame: Rural Areas Uses census villages as the first stage units. Urban Areas Uses the Urban Frame Survey (UFS) due to the lack of an analogous list from the population census.

Division: Each town is divided into Investigator Units (IV Units) and further into UFS blocks. IV Units: Well-defined geographical areas consisting of about 20 to 40 UFS blocks. UFS Blocks: Compact units with 120-150 households, bounded by clear natural boundaries. Blocks are mutually exclusive and collectively exhaustive, ensuring complete coverage of the town. They are designed with permanent landmarks for easy identification over time.

Activity

On the day 09-07-2024 Inspection of Urban Frame Survey was scheduled in Mormugao area near Vasco Da Gama under the supervision of Ms Rupali Karne ISS . On the particular day,Almost 40 structures were covered on Ward 6 of Mormugao area between the time 11:00 to 14:00 . Currently the UFS is being conducted for the period 2023-2028.Most of the People were co-operative in giving the details. Questionnaires included basic questions like

- Name of the household / Household head
- Single Family / Joint Family
- Number of Kitchens(For understanding the number of families living in a single structure)
- Number of Members in the family

Figure 5.2: Enumerator collecting details from Listed Household

Scheme : Time Use Survey

Area : Bicholim

Supervisor : Rupali Karne ISS

Survey Enumerator : Mr. Sushil Gaur, JSO

About Survey:

National Sample Survey Office (NSSO) has been conducting socio-economic surveys employing scientific methods since 1950. Time Use Survey (TUS), which will collect data on time dispositions of household members, is an area of survey introduced in response to demands from various stakeholders. TUS will be canvassed for the first time during the period January to December 2019.

Objective of the survey: The Time Use Survey (TUS) will enable measuring time spent by individuals on different activities. The primary objective of Time Use Survey (TUS) is to measure participation of men, women and other groups of persons in paid and unpaid activities. The survey will be an important source of information on the time spent in unpaid care giving activities, unpaid volunteer work, unpaid domestic service producing activities of the household members. This will also provide information on time spent on learning, socializing, leisure activities, self-care activities, etc. by the household members.

Activity

On the date 11-07-2024 , TUS inspection was scheduled in the Bicholim Area , North Goa. Out of the 14 samples selected for canvassing 2 samples each day should be covered for 7 days withiut break, Days are categorised as Normal day (Monday to Saturday) and Other day(Sundays and Public Holidays) The Time Use Survey mainly focus on females in the household and how the time is utilised in the past 24 hours . The reason of this is to address , How females who does their household works contributes towards the economy. Usually efforts of household women are categorised as unpaid work , But in another way they are also contributing towards their household by saving money, For eg : A substitute for cooking ,cleaning , childcare will cost an amount of 10000-15000 per month . So it is one form of economic activity . Some amount of information should be filled by the enumerator Subjectively because in most of the cases people won't give exact information regarding their personal details despite being a government survey . Questions regarding all the members in the household will be asked and the activities which done by them in the past 24 hours will be recorded and classified into different categories in the CAPI software

Scheme : HCES

Area : Mollem , South Goa

Supervisor : Rupali Karne, ISS

Survey Enumerator : Mr. Sanil Gaonkar

About Survey:

The National Sample Survey Office (NSSO) conducts household surveys on consumption and consumer expenditure regularly. Initially, data were collected annually up to the 28th round (1973-74). After the 26th round, surveys on consumer expenditure and employment-unemployment were conducted quinquennially. Results were published in rounds 27 (1972-73), 32 (1977-78), 38 (1983), 43 (1987-88), 50 (1993-94), 55 (1999-00), 61 (2004-05), 66 (2009-10), and 68 (2011-12). The latest survey, "Household Consumption Expenditure Survey" for 2022-23, covers the entire Indian Union, excluding some inaccessible villages in the Andaman and Nicobar Islands. Data were collected from 8,723 villages and 6,115 urban blocks, covering 2,61,746 households (1,55,014 rural and 1,06,732 urban),The consumption basket is divided into three categories: Food items, Consumables and Services, and Durable goods. Three questionnaires—FDQ, CSQ, and DGQ—were used in three monthly visits. Another questionnaire, HCQ, gathered household characteristics and demographic details. To avoid bias, all possible sequences of the three questionnaires were used.The survey employs a multistage stratified sampling design with villages/urban blocks as first stage units and households as ultimate stage units. Simple Random Sampling Without Replacement (SRSWOR) is used for sample selection. Households are categorized into three economic groups based on land possession in rural areas or car ownership in urban areas, with 18 households selected from each group for representation.

Activity

After the listing of all the households . A total of 18 households in the Mollem Area,South Goa are has been selected for canvassing.Three visits should be conducted in each household in a random order(Here the order was First Visit:CSQ+HCQ,Second Vist:FDQ,Third Visit:DGQ) Therefore a 18x3=54 visits ineffect should be done in canvassing stage . I participated in the canvassing stage of second visit (FDQ),The questionnaire included different sections regarding the consumption of food items like, Consumption of Dairy Products , Vegetables, Fruits,Dry Fruits,Egg,Fish,Chicken, Edible Oil,Spices, Packaged& processed food etc.The consumption of these goods are classified as Last 7 days/Last 30 days according to their shelf life

Figure 5.3: Pictures of survey enumerator & supervisor while collecting the data on household consumption expenditure survey with respective members of selected household at Mollem Village)

Scheme : ASUSE

Area : Madgaon , Aquem

Survey Enumerator : Mr. Arjun Godkar

About Survey:

The Annual Survey of Unincorporated Sector Enterprises (ASUSE) is conducted by the Ministry of Statistics and Programme Implementation (MoSPI) in India to capture the economic and operational characteristics of unincorporated non-agricultural establishments in sectors like manufacturing, trade, and other services (excluding construction). ASUSE covers rural and urban areas across India, excluding difficult-to-access villages in the Andaman and Nicobar Islands. It includes unincorporated non-agricultural establishments under proprietorship, partnership (excluding LLPs), Self-Help Groups, cooperatives, and societies/trusts in the sectors of manufacturing, trade, and other services. The survey follows a multi-stage stratified sampling scheme with census villages in rural areas (Panchayat wards in rural Kerala) and UFS (Urban Frame Survey) blocks in urban areas as first stage units, and establishments as ultimate stage units. Large FSUs undergo an intermediate stage of sampling, with hamlet groups in rural areas and sub-blocks in urban areas. In ASUSE 2021-22, data were collected from 4,16,269 establishments (2,39,981 in rural and 1,76,288 in urban) across 16,199 FSUs (8,425 in rural and 7,774 in urban). In ASUSE 2022-23, data were collected from 4,58,938 establishments (2,58,296 in rural and 2,00,642 in urban) across 16,382 FSUs (8,495 in rural and 7,887 in urban). Data collection was based on an area frame, with selected establishments primarily providing data through oral enquiries for a monthly reference period, while larger establishments provided annual data from audited accounts. ASUSE 2021-22 used Pen-and-Paper Personal Interviews (PAPI), while ASUSE 2022-23 used Computer-Assisted Personal Interviews (CAPI).

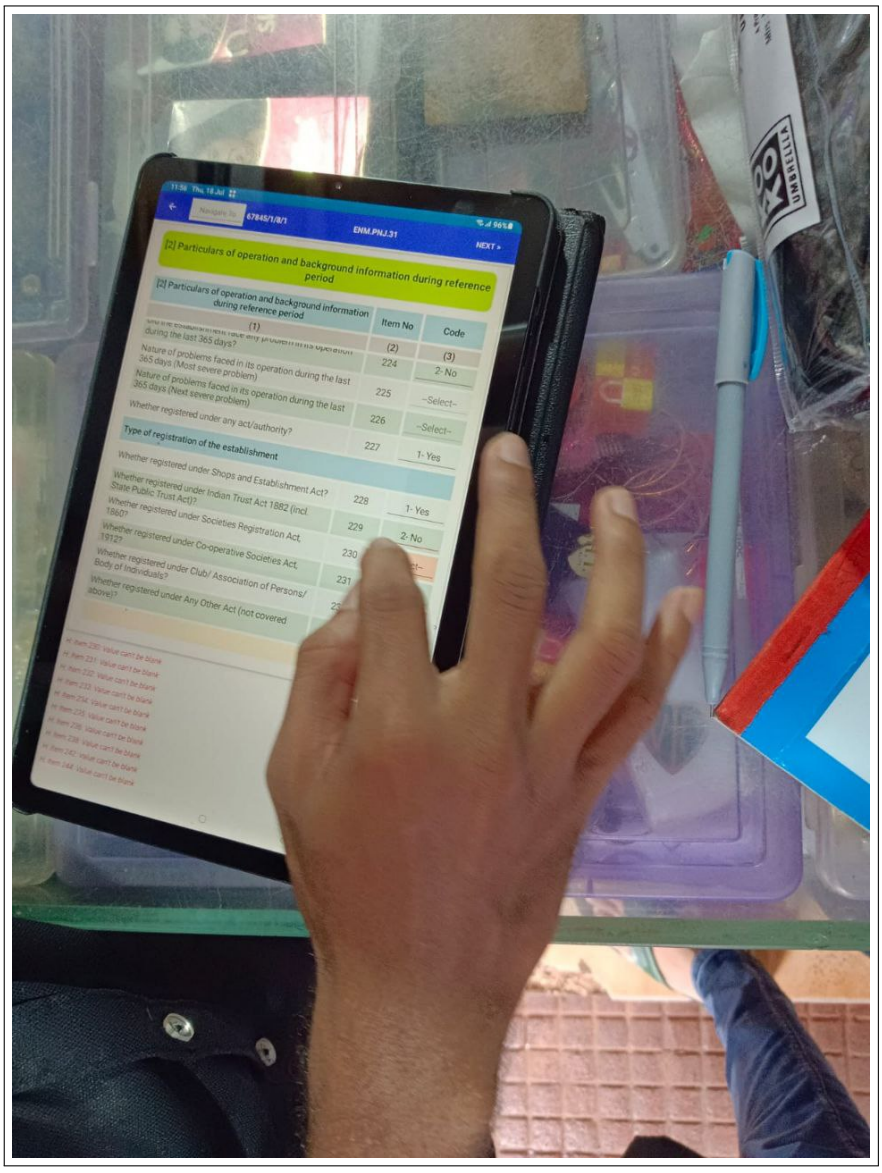


Figure 5.4: Information being collected using CAPI software

Activity

The canvassing of ASUSE on the Madgaon , Aquem area was done on the date 19-07-2024 , The type of sample was urban sample . A total 23 enterprises were selected to canvassing after the complete listing . 5 establishments were canvassed during the visit and the required time for canvassing each establishment is typically ranges from 40 minutes to 1 hour . But most of the establishments usually never give that much time towards the enumerators , So the aim was to collect maximum information in minimum time with maximum precision , Lots of questions regarding the business is asked . Starting from Owners name , Contact number , Type of activity , Starting date of enterprise, Type of establishment (Own account / Hired worker) , Bank account type , Working time in an year (Whether seasonal / Not , Number of hours working in a day , Does the audit is maintained or not , Usage of Computer , Did the establishment registered under any act , Whether registered with GST , Education , Number of activities , How much Sales per month , How much stock is brought per month , How many workers are hired , Amount of electricity Bill / Water Bill , Shop rented or own building , Cost of fuel per month ,WHether the establishment is single / Having branches , Expenses for row materials , Expenses for maintanence , Expenses for advertisement , Expenses for Washing and cleaning , Mode of transportation for row materials , Telephone Bills , Bank Brockerage Charges , Insurance charges , Other expenses , Perks given to workers (PF/insurance) , Land Value and Building value , Transport equipment bill , Furnisture costs , Whether using any software , Cost of using software , Tools and fixed assets , Loans , Whether having a website of not , Whether having online sales , Mode of Internet , Types of problems facing in business

Scheme : PLFS

Area : Shiroda(Rural),South Goa

Supervisor : Bamanne Mohan Jinnappa ISS

Survey Enumerator : Mr. Prasad Bagkar

About the survey:

The Periodic Labour Force Survey (PLFS) in India, conducted by the National Statistical Office (NSO), provides crucial data on employment and unemployment. Launched in April 2017, PLFS offers annual estimates of key indicators such as Labor Force Participation Rate (LFPR), Worker Population Ratio (WPR), and Unemployment Rate (UR) for both rural and urban areas. LFPR measures the percentage of the population either working or actively seeking work, WPR indicates the percentage employed, and UR reflects the percentage of the labor force that is unemployed but seeking work. The survey covers a representative sample of households across India, focusing on individuals aged 15 and above. PLFS data is vital for assessing employment conditions, designing interventions, and monitoring policies. Recent trends show higher unemployment in urban areas compared to rural ones, with notable gender disparities in employment data.

Activity

The canvassing stage of the PLFS survey in Shiroda village, South Goa, was conducted on 25/07/2024. Eight rural sample households were to be selected, with two canvassed on the day. Canvassing typically takes 45 minutes to 1 hour, but maximum information needs to be collected efficiently. Both households were cooperative in providing information.

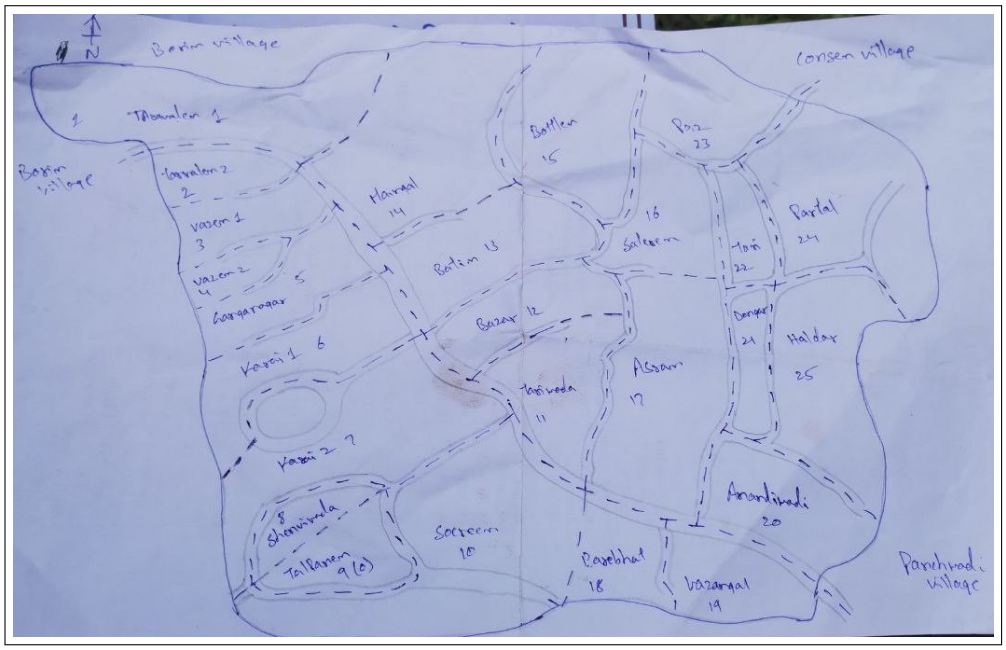


Figure 5.5: Map of Shiroda Village