Exploring the Possibility of Estimating the Monetary Value of Women's Contribution to GDP

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Aasha Kapur Mehta Professor of Economics Indian Institute of Public Administration New Delhi **List of Tables**

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EXPLORING THE POSSIBILITY OF ESTIMATING THE MONETARY VALUE OF WOMEN'S CONTRIBUTION TO GDP

Aasha Kapur Mehta Sanjay Pratap

Chapter 1: Introduction

1.1 The Context and Statement of the Problem

There are serious inaccuracies in recording women's contribution to work and output. As a result, much of women's contribution to GDP becomes invisible. This has an impact on the status of women in society and perceptions regarding women's contribution to economic activities and output and also affects policies pertaining to inclusion of women in development.¹ NSSO defines economic activity as "any activity that results in production of goods and services that adds value to national product."²

Taking cognizance of the statistical invisibility of women's work, the National Policy for the Empowerment of Women 2001 states that women's "contribution to socio-economic development as producers and workers will be recognized in the formal and informal sectors (including home based workers) and appropriate policies relating to employment and to her working conditions will be drawn up. Such measures could include:

- i) the reinterpretation and redefinition of conventional concepts of work wherever necessary e.g. in the Census records, to reflect women's contribution as producers and workers;
- ii) the preparation of satellite and national accounts; and
- iii) development of appropriate methodologies for undertaking (i) and (ii) above."

A decade and a half later, the significant contribution that women make to the economy remains unrecognised. This study is a first step towards correcting the statistical invisibility of women's work.

¹Mehta, Aasha Kapur (1996). "Recasting Indices for Developing Countries: A Gender Empowerment Measure," *Economic and Political Weekly*, Vol. 31, No. 43, October 26; Mehta, Aasha Kapur (2000). The Invisible Workers: Women's Unrecognised Contribution to the Economy, *Manushi*, November-December.

²National Sample Survey Organisation (1997). NSS Report No. 416: Participation of Indian Women in Household Work and other Specified Activities 1993-94. NSS 50th Round 1993-94, Department of Statistics, Government of India, New Delhi. Para 2.2.

Data on workforce participation rates is available from the Census on a decennial basis and from the National Sample Survey Organisation (NSSO) large sample round on a quinquennial basis. It is well known that women work longer hours than men. Yet, despite improvements, the data collected by the Census and NSS show very low work participation by women. Census 2011 estimates the workforce participation rate for females to be 25.52% for the country, 30.3% for rural areas and 15.44% for urban areas. The corresponding estimates for males are 53.26%, 53.03% and 53.76%. The NSS estimates of workers in the population in 2011-12 were 24.8% for females and 53.5% for males in rural areas and 14.7% for females and 54.6% for males in urban areas. These estimates under-report the proportion of women workers in the population. Consequently, they also under estimate women's contribution to national product. This needs to be rectified.

This study tries to understand the reasons why there are significant gaps between estimates of women's work participation from different official sources and those collected through micro studies. It builds on the existing literature on this subject and uses findings from micro studies in selected villages and slums in different parts of India to draw attention to the many different kinds of work that women contribute to enable the survival of their families.

There are no official estimates of women's contribution to Gross Domestic Product. A few attempts at estimation have been made in the literature but these are based on either the low official worker population estimates or on inclusion of non System of National Accounts (SNA) or "extended work."

The International SNA 2008 defines production as a "physical process, ... in which labour and assets are used to transform inputs of goods and services into outputs of other goods and services. All goods and services produced as outputs must be such that they can be sold on markets or at least be capable of being provided by one unit to another, with or without charge." In the context of household production, the International SNA grapples with the problem regarding the treatment of activities that produce goods or services that could have been supplied to others on the market but are actually retained by their producers for their own use. It notes that these cover the following:

a. The production of agricultural goods by household enterprises for own final consumption;

b. The production of other goods for own final use by households: the construction of dwellings, the production of foodstuffs and clothing, etc.;

c. The production of housing services for own final consumption by owner occupiers;

d. The production of domestic and personal services for consumption within the same household: the preparation of meals, care and training of children, cleaning, repairs, etc.

While recognizing that "all of these activities are productive in an economic sense" it notes that "inclusion of large non-monetary flows of this kind in the accounts together with monetary flows can obscure what is happening on markets and reduce the analytic usefulness of the data."³ Hence, it "includes all production of goods for own use within its production boundary, as the decision whether goods are to be sold or retained for own use can be made even after they have been produced, but it excludes all production of services for own final consumption within households (except for the services produced by employing paid domestic staff and the own-account production of housing services by owner occupiers)."⁴

The problem in the Indian context is the fact that a large proportion of women's contribution to SNA activities, i.e., the production of goods and services that **are** "supplied to others on the market" **as well as** those that "could have been supplied to others on the market but are actually retained by their producers (or households) for their own use", is invisible. Hence, estimation of women's contribution to the national Gross Domestic Product (GDP) requires the use of more accurate estimates of women's workforce participation as well as their contribution to production of goods and services that are part of the production boundary. This study explores possible options for bridging these gaps.

Objectives

The study has two objectives:

- i) To highlight women's contribution to economic activities as workers.
- ii) To explore the possibility of estimating the monetary value of women's contribution to GDP.

Research Questions and Coverage

The study tries to answer the following questions:

1. What are the different kinds of work that women are engaged in?

³ United Nations (2009). System of National Accounts 2008. New York p.6.

⁴ ibid. p. 6 and 7

- 2. What are the national official data sources and estimates regarding women's work? Do these estimates **adequately** capture the work contributed by women? If not, what are the reasons why the economic contribution of women workers becomes statistically invisible?
- 3. Is the data available from official sources adequate for quantifying the monetary value of women's contribution to Gross Domestic Product (GDP)?
- 4. If not, what options can be explored for estimating the monetary value of women's contribution to GDP?
- 5. What are the steps that Government can take to ensure more accurate estimation of women's contribution as producers and workers?

Methodology

The study is based on data collected from both primary and secondary sources. Data pertaining to male and female Workforce Participation Rates, Gross Value Added, GDP etc. was collected from secondary sources such as the Census, NSS and CSO and was analysed. An in-depth review of the literature on women's work was conducted.

Primary data pertaining to women's contribution to work was collected from field work in selected villages and slums in four States of India located in different parts of the country. The four States in which primary data was collected are Karnataka, Odisha, Rajasthan and Tripura. National Commission for Women selected the States and facilitated the field work. The villages and slums in which field work was conducted were selected by the State Commissions for Women. The villages were Ballenahalli, Siddhanaikanahalli and Gungirlahalli in Bangalore Rural District, Karnataka, Padasahi in Khordha district, Odisha, Mandavari in Jaipur district, Rajasthan and Sekerkote in West Tripura district, Tripura. The slums were Jaibhim Nagar, Savithri Bai Nagar and Akkipikki Colony in Bengaluru, Karnataka, Shanti Palli in Bhubaneswar, Odisha, Kathputli Colony in Jaipur, Rajasthan and Radha Nagar⁵ in Agartala, Tripura. The State Commissions facilitated the field work in each case. While those still living in Jaibhim Nagar, Bengaluru, are living in tin shed shanties, others have recently been rehabilitated in situ in low income group housing in Savithri Bai Nagar and Akkipikki Colony. Similarly, slum dwellers in Agartala have been rehabilitated in low income group housing Radha Nagar in Tripura.

Questionnaires were administered to 225 women in villages and 285 women in the slums in the four States. At least 50 women were interviewed in each of four selected villages and slums in

⁵A small number of questionnaires were also administered in Chandan Khala Basti in Agartala.

each State. Where 50 women were not available in a village or slum (as was the case in Karnataka), questionnaires were administered to women in a neighbouring village or slum. Care was taken to include women from different age groups, castes and spatial locations in each village and slum. The study team walked through the different lanes and mohallas in the villages and slums in order to include women from different caste and class groups. The sample selection was constrained by availability of the women in the villages and slums on the days on which the questionnaires were administered. The recall method was used for filling the questionnaires. Focus group discussions were also held with women and men.

The purpose of the field work was to understand the different kinds of economic activities or SNA related activities that women are engaged in as "workers" (whether paid or unpaid). Building on the literature on this subject, the study uses findings from micro studies in the selected villages and slums in the four States in different parts of India, to draw attention to the many different kinds of work that women contribute to enable the survival of their families.

The findings based on analysis of primary data collected from these villages and slums were compared with estimates of women workers from official sources to determine gaps between the two. An attempt was made to understand the reasons why the economic contribution of women workers becomes statistically invisible. The field work based estimates of the proportion of women workers in villages and slums selected for the study were also used in one of the scenarios for estimating the monetary value of women's contribution to GDP.

The detailed methodology used for estimation of women's contribution to GDP is described in Chapter 7 of the Report.

Coverage

The rest of this report is organised as follows.

Chapter 2 presents Census and NSSO estimates of workforce participation rates. Chapter 3 analyses estimates based on data collected in the selected villages and slums in four States located in different parts of the country to show that most women **are** workers. Women work jointly with other family members on farms, in shops and in the household. They look after

animals, sell groceries, make and sell tea, golgappas etc. A large number of women undertake paid work as domestic workers in other people's houses. Many are engaged in embroidery or tailoring or other home based work. A significant proportion of them are not reported as workers. This leads to undercounting of women workers. While the output that they produce may be included in GDP, the extent of women's contribution as workers is underestimated. Hence women's contribution to GDP is also underestimated. Based on analysis of these data findings, the study questions the accuracy of Census data findings that only 25.52% of females are workers compared to 53.26% males. It also questions NSS estimates that only 24.8% females in rural areas and 14.7% of females in urban areas are workers compared with corresponding estimates of 54.3% and 54.6% for males.

Additionally, the daily unpaid arduous tasks of cooking, cleaning and caring are primarily contributed by women. While these are not included in GDP, it is important to recognise that women spend several hours each day on these unpaid household chores that are critical for enabling household survival.

Chapter 4 presents a large number of cases that provide a glimpse into the lives of women's work in villages and slums. Resilience, struggle and despair are a running thread in the lives of women workers in all the villages and slums in the four States. A few interviews with men are also presented in this Chapter.

Chapters 5 and **6** use the evidence from NSSO special studies and other literature to substantiate the field work based findings of this study. **Chapter 5** presents the estimates provided by NSS reports on Participation of Women in Specified Economic Activities along with Domestic Duties. The reports recognize the fact that a large proportion of women characterised as engaged only in domestic duties or household work are actually maintaining kitchen gardens, household poultry, collecting fish, collecting firewood, husking paddy, grinding food-grains, preserving meat, preparing gur, making baskets etc. In other words they are engaged in economic activities. However, this evidence is not used to rectify the estimates of worker population ratio that are presented in the NSSO reports on Employment and Unemployment. Hence this study questions

why the estimates of worker population ratio of women are not corrected despite availability of this evidence.

Chapter 6 briefly reviews the large number of reasons have been cited in the literature regarding the under reporting of women's work. These include the existence of methodological problems pertaining to investigation, biases stemming from definitions used, measurement failure, the nature and style of women's work, the large range of different activities in which women engage thereby making classification difficult, the dominance of domestic work leading to underreporting of other work, convention, unpaid nature of work, mistaken perception of female economic roles by respondents, biases of interviewers/enumerators, intermingling of production for self-consumption with production for sale, cultural/ideological systems, anomalies created by use of advanced economy concepts in agrarian economies, lack of recognition of the multidimensional functions of women, and the fact that they contribute to family economic activities resulting in their personal contribution getting merged with that of the family and thereby becoming invisible.

Chapter 7 uses the data on women's work participation collected from field work as well as data from the Census, National Sample Survey and National Accounts Statistics to try to estimate the value of women's contribution to GDP. **Chapter 8** concludes the Report with a set of actionable recommendations.

Chapter 2

Women's Work Participation Rates: Estimates from Census and NSSO

What are the data sources at the national level that provide information regarding women's work? As mentioned above, data on workforce participation rate is available from the Census on a decennial basis and on the worker population ratio from the National Sample Survey Organisation (NSSO) on a quinquennial basis. NSSO has been conducting all-India household surveys on employment and unemployment on a large sample of households since the 27th Round from October, 1972 to September, 1973. However, despite improvements, estimates of female workers are significantly under-reported by both the Census and the NSSO.

Male workers are estimated to be above 50% of the male population in all the Census estimates. However the proportion of female workers in the female population is unrealistically low. It is 14% in 1971, 19.8% in 1981, 22.3% in 1991 and around 25% in 2001 and 2011. Census 2011 estimates the workforce participation rate for females to be 25.52% for the country, 30.3% for rural areas and 15.44% for urban areas. The corresponding estimates for males are 53.26%, 53.03% and 53.76% (see Tables 2.1 and 2.2 below).

 Table 2.1: Male, Female and Total Workers as a percent of Male, Female and Total

 Population in India: Census Estimates

Census	Males	Females	Persons
1971	52.7	13.9	34
1981	52.6	19.8	36.8
1991	51.6	22.3	37.5
2001	51.7	25.6	39.1
2011	53.26	25.52	39.79

 Table 2.2: Main, Marginal and Total Workers in 2011 in India disaggregated by sex (percent of population)

		Main workers		Marginal workers		Total workers	
		Males	Females	Males	Females	Males	Females
India	Total	43.83	15.21	9.42	10.31	53.26	25.52
India	Rural	41.63	16.69	11.39	13.33	53.03	30.03
India	Urban	48.65	11.88	5.11	3.56	53.76	15.44

Source: Census 2011

According to data collected by the NSS, an estimated 54.3 % and 54.6% of males were in the work force in both rural and urban areas in 2011-12. The corresponding percentages for females were 24.8% and 14.7% in rural and urban areas respectively. Over all the nine NSSO large sample rounds between 1973-74 and 2011-12, while the worker population ratio for males has **uniformly** been more than 50 percent in both rural and urban areas, the corresponding estimate for females has been **uniformly low** and has varied between 24.8 to 34 percent for rural and 13.4 to 16.6 percent for urban areas (Table 2.3 and 2.4). In other words, according to NSS estimates, female WPR is roughly **half** that for men in rural areas and **one-fourth** that for men in urban areas. Since at least the 1970s, it has been pointed out that there are serious inaccuracies in the recording of work contributed by women. As a result, women workers and their contribution to economic activity, become statistically invisible.

	Rural		1	Urban
Year	Female	Male	Female	Male
1972-73	31.8	54.5	13.4	50.1
1977-78	33.1	55.2	15.6	50.8
1983	34.0	54.7	15.1	51.2
1987-88	32.3	53.9	15.2	50.6
1993-94	32.8	55.3	15.5	52.1
1999-2000	29.9	53.1	13.9	51.8
2004-05	32.7	54.6	16.6	54.9
2009-10	26.1	54.7	13.8	54.3
2011-12	24.8	54.3	14.7	54.6

 Table 2.3: Workforce Participation of Females and Males: NSS Quinquennial Rounds

Source: NSS report No 458, 1999-2000 and subsequent NSS reports for each Round

Table 2.4: WPR	according to usual	l status (ps+ss) for	persons of all ages (percent)

	Male	Female	Persons
Rural	54.3	24.8	39.9
Urban	54.6	14.7	35.5
Rural + Urban	54.4	21.9	38.6

Source: Key Indicators of Employment and Unemployment in India, 2011-12

Census and NSS Estimates of Male and Female Workers in the Four Selected States

Since field work and data collection were conducted in four States, Census and NSS estimates of rural and urban workers in these four States are presented in Table 2.5 below. As can be seen from the Table, while Census estimates are sometimes larger and sometimes smaller than NSS estimates, the range within and difference between the two sources is relatively small in the case of male workers. However both the range within each series and the difference between the two sources is substantial in the case of female workers.

Both Census and NSS estimates of male workers to population are lowest for urban Rajasthan (at 50.75% and 49% respectively) and highest for rural Karnataka (59.76% and 61.2% respectively). However, in the case of female workers, Census estimates vary from a low of 12.03% for urban Rajasthan to a high of 42.68% for rural Rajasthan, while NSS estimates also cover a large range from a low of 11.3% for urban Tripura to a high of 34.7% for rural Rajasthan.

In the case of female workers, the difference between Census and NSS estimates of workers to population is as large as 10% for rural Karnataka, 8% for rural Rajasthan and 5% for rural Odisha and urban Tripura.

		Census	2011	NSSO 2011-12 usual status (ps+ss)		Difference	
		Males	Females	Males	Females	Males	Females
Karnataka	Total	59	31.87	60	24.3	-1	7.57
Karnataka	Rural	59.76	38.79	61.2	28.7	-1.44	10.09
Karnataka	Urban	57.81	20.81	57.9	16.3	-0.09	4.51
Odisha	Total	56.11	27.16	59	23.3	-2.89	3.86
Odisha	Rural	56.53	29.69	59.2	24.6	-2.67	5.09
Odisha	Urban	54.08	14.12	57.9	15.5	-3.82	-1.38
Rajasthan	Total	51.47	35.12	49.4	29.9	2.07	5.22
Rajasthan	Rural	51.71	42.68	49.5	34.7	2.21	7.98
Rajasthan	Urban	50.75	12.03	49	14.1	1.75	-2.07
Tripura	Total	55.77	23.57	55.6	20.9	0.17	2.67
Tripura	Rural	55.35	26.28	56.2	22.8	-0.85	3.48
Tripura	Urban	56.97	16	52.5	11.3	4.47	4.7

 Table 2.5: Male and Female Workers as Percent of Population in the Selected States:

 Census and NSS Estimates (percent)

India	Total	53.26	25.52	54.4	21.9	-1.14	3.62
India	Rural	53.03	30.03	54.3	24.8	-1.27	5.23
India	Urban	53.76	15.44	54.6	14.7	-0.84	0.74

Source: Census 2011 and NSS Key Indicators of Employment and Unemployment in India, 2011-12

Not only are there massive differences between Census and NSS estimates of female workers as a proportion of female population, but as will be seen in Chapter 3, despite improvements, both these data sources are unable to provide accurate estimates of women workers who work on multiple **economic** activities, both paid and unpaid, within and outside their homes.

Chapter 3

Challenging the Statistical Invisibility of Women's Contribution as Workers: Alternative Estimates based on Field Work

3.1 Women Workers and their Multiple Economic Activities: Study findings from the selected villages

3.1.1. Women Workers in Villages and their Diverse Economic Activities

In order to understand the different kinds of work that women do and their contribution to output, questionnaires were administered to 225 women located in selected villages, i.e., one village each in Odisha, Rajasthan and Tripura and three neighbouring villages in Karnataka. Analysis of the data showed that the 225 women contributed to GDP in many ways. They worked in agriculture as cultivators and casual labour on farms as well as in tea gardens, nursery plantations and kitchen gardens. They were the main producers of products in the animal husbandry sector. They worked to deliver Government Programmes as Anganwadi workers and helpers, teachers, producers who cooked mid-day-meals in schools, SHG facilitators and members for income generating projects, worked at MGNREGA and other Public worksites and as Village Coordinators. They were non-agricultural casual labour/ coolie labour and construction workers. They contributed to **manufacturing** such as through tailoring garments in factories, worked in printing presses and were employed in a supervisory role in a company and also worked in a hotel. Further, they also engaged in petty trade by travelling from house to house (pheri work) to sell cosmetics etc., ran grocery shops and provision stores as well tea shops, earned income through home based work such as rolling bidis in the house, making baskets and as tailors.

Many of them worked not just as cultivators or casual labour but contributed to work through combining two, three or even four different areas of work each day or at different times depending on the season.

• What is very significant is that as many as 205 out of 225 women (or 91% women) were engaged in a wide range of economic activities that contribute to GDP such as agriculture, animal husbandry, casual labour/ construction work, tea garden labour, running shops and provision stores, tailoring, garments business, pheri work, teaching, etc.

- If we also include the participation of women in the specified list of economic activities e.g., grinding of food grains or kitchen gardening etc. in the home as many as 210 out of 225 women (or over 93% women) were engaged in economic activities or activities that contribute to GDP as per the SNA.
- Only 15 out of 225 women respondents (or 6.67% women) were engaged only in domestic duties or were not contributing to GDP.
- What is also significant is that as many as 155 out of 225 women (or around 70% women) were not only working but were engaged in multiple economic activities throughout the year.
- 38 women worked in agriculture on their own farms and also tended to cows or goats or poultry each day (animal husbandry) and additionally worked as casual labour on the farms of others or as nonagricultural casual labour.
- 34 women worked in both agriculture and animal husbandry.
- 24 women undertook casual labour together with either agriculture or animal husbandry.
 - Still others were engaged in **multiple** tasks such as:
 - Agriculture + animal husbandry + casual labour
 - Agriculture + animal husbandry
 - Agriculture + casual labour

•

- Casual labour + animal husbandry
- Animal husbandry + SHG
- o Animal husbandry + MGNREGA
- Animal husbandry + SHG + MGNREGA
- Tea garden labour + MGNREGA
- Agriculture + animal husbandry + tailoring
- Agriculture + animal husbandry + casual labour + MGNREGA
- Agriculture + tailoring
- Casual labour + animal husbandry + SHG + MGNREGA
- o Casual labour + MGNREGA
- Agriculture + animal husbandry + MGNREGA
- Agriculture + animal husbandry + mushroom + SHG
- Agriculture + animal husbandry +SHG + making sauce, jam etc.
- \circ Agriculture + pension
- Agriculture + SHG
- Anganwadi helper + agriculture+ animal husbandry
- Anganwadi helper + animal husbandry + SHG
- Anganwadi worker + animal husbandry
- Anganwadi worker + agriculture + animal husbandry
- Animal husbandry + making bamboo baskets
- Animal husbandry + SHG + MGNREGA + prepares mid-day-meal in school
- Animal husbandry + SHG facilitator in a project
- Animal husbandry + tailoring + agriculture (serves food to labour)
- Casual labour + animal husbandry + SHG
- Casual labour + midwife
- Domestic worker + MGNREGA
- Employed in printing press + tailoring at home
- Pheri work (selling cosmetics) + animal husbandry

- Garment tailoring in factory + agriculture 0
- MGNREGA + public works
- SHG + village coordinator 0
- SHG member + MGNREGA 0
- SHG member + nursery for plants 0
- Shop provision store + tea 0
- Supervisor in a company + animal husbandry 0
- Tailoring + animal husbandry 0
- Tailoring + animal husbandry + MGNREGA 0
- Tea garden labour + animal husbandry
- Tea garden labour + animal husbandry + MGNREGA
- Tea garden labour + animal husbandry + SHG
- Tea garden labour + animal husbandry + SHG + MGNREGA
- Teacher at private school + agriculture + animal husbandry 0
- In addition to the 155 out of 225 women who were engaged in multiple economic activities, there were 9 who women worked only in agriculture, 17 who worked only in animal husbandry and 10 only as casual labour.
- Another 10 were either running a garments business or shops selling groceries, provisions, vegetables or tea, did tailoring work or worked in a hotel.
- While agriculture, animal husbandry and casual labour were the predominant areas of • work in the villages in Karnataka, Rajasthan and Odisha, tea garden labour, MGNREGA projects, animal husbandry and bidi rolling were predominant in Tripura. MGNREGA has been exceptionally well implemented in Tripura. Casual labour, tailoring, Anganwadi worker/ helper, teacher and shop-keeper were common across States. In Karnataka, a few women reported that they worked in a garment factory, printing press, hotel, etc. Poultry predominated in Odisha while a few women were also involved in mushroom cultivation and activities like jam making.

The number and percent of women who reported undertaking each of these tasks and combinations thereof in the selected villages are presented in Table 3.1 below.

Table 3.1: The different kinds of Livelihoods through which women contribute to GDP in
the Selected Villages

Nature of work Women of all ages	Frequency	Percent
Agriculture + animal husbandry + casual labour	38	16.89
Agriculture + animal husbandry	34	15.11
Animal husbandry	17	7.56
Agriculture + casual labour	13	5.78
Casual labour + animal husbandry	11	4.88
Casual labour	10	4.44

Agriculture	9	4.00
Animal husbandry + SHG	5	2.22
Animal husbandry + MGNREGA	4	1.78
Animal husbandry + SHG + MGNREGA	4	1.78
Bidi rolling in house	4	1.78
Tea garden labour + MGNREGA	3	1.33
Agriculture + animal husbandry + casual labour + MGNREGA	2	0.89
Agriculture + animal husbandry + tailoring	2	0.89
Agriculture + tailoring	2	0.89
AWW	2	0.89
Casual labour + MGNREGA	2	0.89
Tailoring	2	0.89
Agriculture + pension	1	0.44
Agriculture + animal husbandry + MGNREGA	1	0.44
Agriculture + animal husbandry + mushroom + SHG	1	0.44
Agriculture + animal husbandry +SHG + making sauce, jam etc.)	1	0.44
Agriculture + SHG	1	0.44
Anganwadi helper + agriculture+ animal husbandry	1	0.44
Anganwadi helper + animal husbandry + SHG	1	0.44
Anganwadi Teacher/ AWW + animal husbandry	1	0.44
Anganwadi worker + agriculture + animal husbandry	1	0.44
Animal husbandry + making bamboo baskets	1	0.44
Animal husbandry + SHG + MGNREGA + prepares mid-day-meal in school	1	0.44
Animal husbandry + SHG facilitator in a project	1	0.44
Animal husbandry + tailoring + agriculture (serves food to labour)	1	0.44
Casual labour + animal husbandry + SHG	1	0.44
Casual labour + animal husbandry + SHG + MGNREGA	1	0.44
Casual labour + midwife for free	1	0.44

Domestic worker + MGNREGA	1	0.44
Employed in printing press + tailoring at home	1	0.44
Pheri work(selling cosmetics) + animal husbandry	1	0.44
Garment tailoring in factory + agriculture	1	0.44
Garments business	1	0.44
Grocery shop	1	0.44
MGNREGA	1	0.44
MGNREGA + public works	1	0.44
SHG	1	0.44
SHG + village coordinator	1	0.44
SHG member + animal husbandry + daily labour + MGNREGA	1	0.44
SHG member + MGNREGA	1	0.44
SHG member + nursery for plants	1	0.44
Shop provision store + tea	1	0.44
Shop selling vegetables and provision store	1	0.44
Shopkeeper	1	0.44
Supervisor in a company + animal husbandry	1	0.44
Tailoring + animal husbandry	1	0.44
Tailoring + animal husbandry + MGNREGA	1	0.44
Tea garden labour + animal husbandry	1	0.44
Tea garden labour + animal husbandry + MGNREGA	1	0.44
Tea garden labour + animal husbandry + SHG	1	0.44
Tea garden labour + animal husbandry + SHG + MGNREGA	1	0.44
Teacher at private school + agriculture + animal husbandry	1	0.44
Working in hotel	1	0.44
Specified activities only	5	2.22
Not engaged in economic activities	15	6.67
Total	225	100.00

3.1.2. Women Workers: Age and Work Profile

The age and work profile of the 225 women respondents in the selected villages are presented in Table 3.2 below. As many as 91% of the women respondents in the villages reported that they were working. The estimate of workers in the age group 15 to 59 was 94% or 96.52% depending on whether the 5 women participating only in the specific activities listed above - grinding food grains, stitching, teaching their children, etc. - are included or not. Those participating in these activities are recognized as workers by SNA 2008. Even among those above 69 years of age, 57% reported that they were contributing to GDP as workers.

Age	Number of respondents	Women workers	Women workers including specified economic activities	Women not working based on col. 3	Women not working based on col. 4	Percent Workers based on col. 3	Percent Workers based on col. 4
15-59	201	189	194	12	7	94.03	96.52
60-69	17	12	12	5	5	70.59	70.59
69 & Above	7	4	4	3	3	57.14	57.14
Total	225	205	210	20	15	91.11	93.33

Table 3.2: Age and work profile of women respondents in the Selected Villages

3.1.3. Women's Triple Burden of Work in Villages: Economic Activities, Household work and Care

Estimates presented in Table 3.3 show that out of 225 women respondents, 129 worked in agriculture, 73 in other economic activities outside home, 141 in animal husbandry, 110 in other economic activities inside home, 212 in household work (domestic duties) not including care and 157 provided care to other family members. The matrix also provides insights regarding the multiple tasks that the women engaged in together with a given task. For example, the sixth row of the matrix shows that while 98.6% women (212 out of 225 women) were engaged in household chores (domestic duties) not including care, as many as 125 of them worked in agriculture, 71 in other economic activities outside the home, 135 in animal husbandry, 108 in other economic activities inside the home, 5 in the specified list of economic activities included

as work by NSS only in their special reports discussed in Chapter 5 below and 148 of them provided care to other family members. Similarly, the first row of the matrix shows that of the 129 women who worked in agriculture, 23 also worked in other economic activities outside home, 92 worked in animal husbandry and 82 in other economic activities inside home. Additionally, almost all of them (125 out of the 129) were doing household work or domestic duties such as cooking, cleaning and washing dishes and clothes and 95 of them provided care to their children or elderly or ill.

		Econ		Household work and Care			
	Agriculture	Other economic activities outside home	Animal Husbandry	Other econo mic activi ties inside home	Participating only in specified economic activities	Household work or domestic duties not including care	Care
Agriculture	129	23	92	82	0	125	95
Other economic activities outside home	23	73	39	27	0	71	51
Animal Husbandry	92	39	141	79	0	135	97
Other economic activities inside home	82	27	79	110	0	108	91
Participating only in specified economic activities	0	0	0	0	5	5	4
Household work (domestic duties) not including care	125	71	135	108	5	212	148
Care	95	51	97	91	4	148	157

 Table 3.3: Number of Women Engaged in Economic Activities, Household work and Care in the Selected Villages

3.1.4. Animal Husbandry

Most of the tasks required for rearing livestock and poultry are performed by women. Around 154 out of 225 women respondents in the selected villages owned 206 cows, 23 buffaloes, 15 pigs, 295 poultry (not including poultry owned by 5 women respondents), 246 goats, 7 bulls and 2 sheep. As many as 91% of them (or 141 women) were engaged in tasks such as cleaning the animal shed, buying feed, preparation of animal feed, fetching fodder, feeding, taking the animals for grazing, milking, making cow dung-cakes, taking care of new born animals, bathing the animals etc. (see Table 3.4 below). Most women stated that they spent between 2 to 4 hours each day in tending to the animals. The number and percent of women spending time on each animal husbandry related activity is presented in Table 3.4 below.

Task	Number of women performing the task	Percent
Cleaning the shed	119	77.27
Buying feed	63	40.91
Preparation of animal feed	94	61.04
Fetching fodder	78	50.65
Feeding	119	77.27
Grazing animals	74	48.05
Milk processing	73	47.40
Making cow dung-cakes	67	43.51
Care of new born animals	96	62.34
Bathing the animals	84	54.55
Total with animals	154	68.44
Total engaged in Animal Husbandry	141	62.66

 Table 3.4: Number and percent of women undertaking each of the tasks pertaining to animal care

Note: Out of 154 women who own animals/poultry, 13 did not spend time in animal husbandry related activities.

3.1.5. Women's Multiple Economic Activities in addition to Household Work in Villages: Main workers, Marginal Workers or Non-Workers?

Analysis of the time invested by women workers in different tasks based on estimates in Tables 3.5 and 3.6 shows that 61.24% of the 129 women in the selected villages work for 8 to 10 hours each day in agriculture. Similarly 60.27% of 73 women work for 8 to 10 hours each day as casual labour or in other activities outside the house. Half the 141 women who are in animal husbandry spend 2 to 4 hours work tending to animals or poultry each day. **Half** the 225 women respondents in the villages contribute a few hours through other economic activities such as rolling bidis or tailoring inside the home. Additionally, as mentioned above, 94.26% women (212 out of 225) cook, clean, wash dishes and clothes etc. in their own homes. Over 50% of them spend 4 to 6 hours on these tasks while another 29% spend 6 to 8 hours on these tasks each day.

Table 3.5: Number of Women Engaged in Agriculture, Animal Husbandry, Other Economic Activities, Domestic Work and Care and Time Spent on Each Task in the Selected Villages

Activity Hours worked	Agriculture	Other economic activities outside the home	Animal Husbandry	Other economic activities inside the home	Specified activities only	Household work or domestic duties not including care	Care
<2	6	3	47	92	4	3	58
2 to< 4	10	6	71	18	1	31	68
4 to < 6	14	13	18			107	25
6 to <8	17	3	3			62	1
8 to <10	79	44	1			3	5
10 to <12	3	3				5	
12 to <14		1	1			1	
14 and above							
Number engaged in this activity	129	73	141	110	5	212	157
Number not engaged in this activity	96	152	84	115	220	13	68
Total	225	225	225	225	225	225	225

Table 3.6: Time Spent by Women in Economic Activities, Domestic Work and Care in the Selected Villages (Percent of women reporting that they spent the stipulated time on each task)

All States (Percent)	Agriculture	Other economic activities outside the home	Animal Husbandry	Other economic activities inside the home	Specified activities only	Househol d work (domestic duties) not including care	Care
<2	4.65	4.11	33.33	83.64	80.00	1.42	36.94
2 to< 4	7.75	8.22	50.35	16.36	20.00	14.62	43.31
4 to < 6	10.85	17.81	12.77			50.47	15.92
6 to <8	13.18	4.11	2.13			29.25	0.64
8 to <10	61.24	60.27	0.71			1.42	3.18
10 to <12	2.33	4.11				2.36	
12 to <14		1.37	0.71			0.47	
14 and above							
Percent engaged in this activity	57.33	32.44	62.67	48.89	2.22	94.22	69.78
Percent not engaged in this activity	42.67	67.56	37.33	51.11	97.78	5.78	30.22
Total	100.00	100.00	100.00	100.00	100.00	100.00	100.00

3.2. Women Workers and their Multiple Economic Activities: Study findings from the Selected Slums

3.2.1 Women Workers in Slums and their Diverse Economic Activities

In order to understand the kind of work contributed by women and their contribution to output, questionnaires were administered to 285 women located in selected slums, i.e., one slum each in Odisha, Rajasthan and Tripura and two adjoining and one neighbouring slum in Karnataka. Analysis of the data showed that the 285 women contributed to GDP in many ways. They worked as domestic workers in other people's homes where they washed dishes and clothes and cooked. They also cooked in hotels and cleaned gyms. While some were teachers in schools or tailoring teachers or earned money through tuitions and coaching classes, one was even a

Lecturer in a college. Still others were peons in schools or Municipality Sweepers or worked for card screen-printing company. While some were unskilled casual labourers and worked as head loaders and construction workers others were skilled and worked as beldars, Raj mistry, gardeners and tailors and provided body massage.

They contributed to **manufacturing** such as through making products such as phenyl, paper plates and cups, jewellery, dolls, chains, anklets, rudraksh and pens. Further, they also engaged in **petty trade** by travelling from house to house (pheri work) to exchange old clothes for utensils, sold bhutta (maize) or cosmetics and bangles ran fast food shops, or shops that sold meat, vegetables, fruits, grocery and other provisions and made and sold tea. They contributed to national output through **home based work** such as making agarbattis, kathputlis and torans. They also made cloth flowers, ayurvedic medicines. They made vadis, papad, pickle, golgappas (or gupchup) and in many cases sold these products on a daily or weekly basis. They worked to deliver **Government Programmes as** Anganwadi workers and helpers and ASHA Sahyogini, and SHG members. Some did social work. One was a rag picker while another begged for a living.

In several cases they contributed to work through combining two, three or even four different areas of work each day. Clearly therefore, almost all the women who were available in the selected slums at the time of conducting the survey, were engaged in livelihood generating activities.

- What is very significant is that as many as 230 out of 285 women or 80.70% of women were engaged in a wide range of economic activities or activities that contribute to GDP.
- If we also include the participation of women in the specified list of economic activities e.g., kitchen gardening etc. in the home as many as 241 out of 285 women or 84.56% women were engaged in economic activities or activities that contribute to GDP.
- However, 19.30% women or 55 out of 285 women were engaged only in domestic duties in their own home.
- As many as 87 out of 285 women or over 30% women earned their livelihood as domestic workers in the houses of others.
- What is also significant is that several women were not just working on one task but were engaged in multiple economic activities throughout the year.
- For instance some of those who were domestic workers also worked in income generating projects through an SHG or in a school or as construction labour.
- Still others were engaged in **multiple** tasks such as:
 - Casual labour + making vadi

- Domestic worker + tailoring teacher
- Lecturer in a college + part time tuition
- Making and selling ayurvedic medicines + rudraksh + chains
- Making and selling cloth flowers + anklets + dolls + ayurvedic medicines
- Making and selling cloth flowers + dolls + social work in church
- Making and selling dolls + ayurvedic medicines + massage for women + torans
- Making and selling dolls + chains + rudraksh + pens
- Making and selling dolls + chains + rudraksh + pens (jointly with husband)
- Making ayurvedic medicines + dolls + rudraksh
- Making dolls + tailoring
- Making dolls + torans
- Making kathputli + painting stitched clothes
- Making paper plates + casual labour
- Municipality sweeper + SHG
- Peon in a private school + domestic worker
- SHG Tailoring + shop keeper
- SHG + domestic worker
- Casual labour + domestic worker
- Cleaning gym + domestic worker
- Making agarbattis + domestic worker
- ASHA Sahyogini in AWC + shop + tailoring
- Casual labour (building construction) + domestic worker
- Tailoring + care taker in a private school
- Tailoring + tea seller
- Tailoring at home + tailor in shop
- While 32 women worked only as casual labour or construction labour, 10 made and sold kathputlis, another 10 were tailors, 9 were shop keepers, 8 worked as Anganwadi workers/helpers/ASHA Sahyogini and 6 were sweepers. Several others were either running a garments business or making gupchup or vadi papad or worked in a hotel or hostel. One was a Lecturer.
- One third of the women who were interviewed in the slums in Karnataka and Tripura and half the women in Odisha were working as domestic workers in several houses.
- However, there were certain areas of work that were unique to each of the States. For instance, in Karnataka, a large number of women were engaged in making and selling dolls, cloth flowers, chains and other jewellery, rudraksh chains, pens, torans and ayurvedic medicines. Those who made ayurvedic massage oil also gave massage. In Odisha, several women were shopkeepers or made vadis, papads or golgappas. Additionally many were members of SHGs that were engaged in income generating projects such as making and selling phenyl. In Rajasthan, a large number of women made kathputlis and others did Pheri work, rag picking, selling bhutta (maize), vegetables, tailoring and gardening. However, while very few women living in slums reported that they were not working in Karnataka, Odisha and Rajasthan, several women in slums in Tripura reported that they did not work.

The number and percent of women respondents who reported undertaking **each** of these tasks or combinations thereof in the selected villages are presented in Table 3.7 below.

Table 3.7: The different kinds of livelihoods through which women contribute to GDP in the Selected Slums

Type of Work contributed by Women in the Selected Slums	Frequency	Percent
Domestic worker	87	30.53
Housework only	55	19.3
Casual labour including construction	32	11.23
Making kathputli	10	3.51
Tailoring	10	3.51
Shop keeper	9	3.16
Sweeper	6	2.11
Anganwadi helper	4	1.40
Making golgappas or gupchup	4	1.40
Anganwadi worker	3	1.05
Domestic worker + SHG	3	1.05
Making dolls	3	1.05
Casual labour + domestic worker	2	0.70
Making and selling dolls	2	0.70
making paper plate	2	0.70
Municipality sweeper	2	0.70
ASHA sahyogini in AWC + shop + tailoring	1	0.35
Begs for a living	1	0.35
Casual labour (building construction) + domestic worker	1	0.35
Casual labour + making vadi	1	0.35
Church consultant	1	0.35
Cleaning gym + domestic worker	1	0.35
Cook in a hotel	1	0.35
Cycle repair work	1	0.35
Domestic worker + tailoring teacher	1	0.35
Gardening	1	0.35
Hostel house keeping	1	0.35
Hotel worker	1	0.35
Lecturer in a college + part time tuition	1	0.35

Making agarbattis	1	0.35
Making agarbattis + domestic worker	1	0.35
Making and selling ayurvedic medicines + rudraksh + chains	1	0.35
Making and selling cloth flowers + anklets + dolls + ayurvedic medicines	1	0.35
Making and selling cloth flowers + dolls + social work in church	1	0.35
Making and selling dolls + ayurvedic medicines + massage for women + torans	1	0.35
Making and selling dolls + chains + rudraksh + pens	1	0.35
Making and selling dolls + chains + rudraksh + pens (jointly with husband)	1	0.35
Making and supplying vadi to hotel	1	0.35
Making ayurvedic medicines + dolls + rudraksh	1	0.35
Making vadi	1	0.35
Making vadi, papad in SHG	1	0.35
Making vadi, papad, pickle	1	0.35
Making dolls + tailoring	1	0.35
Making dolls + torans	1	0.35
Making kathputlis + painting stitched clothes	1	0.35
Making papad	1	0.35
Making paper plate and cup	1	0.35
Municipality sweeper	1	0.35
Municipality sweeper + SHG	1	0.35
Paper plate making + casual labour	1	0.35
Peon in a private school + domestic worker	1	0.35
Pheri work	1	0.35
Private job in a company for screen printing of cards	1	0.35
Rag picker	1	0.35
Regular salaried	1	0.35
Selling bhutta (maize)	1	0.35
Selling cosmetics and bangles	1	0.35
Selling fruits	1	0.35
Selling massage oil and body massage	1	0.35
Selling meat	1	0.35
Selling vegetable with husband	1	0.35
SHG Tailoring + shop keeper	1	0.35

Supervision work in doctor's house	1	0.35
Tailoring + care taker in a private school	1	0.35
Tailoring and tea seller	1	0.35
Tailoring at home + tailor in shop	1	0.35
Tuition/coaching class	1	0.35
Total	285	100.00

3.2.2. Age and work profile of women respondents in the Selected Slums

The age and work profile of the 285 women respondents are presented in Table 3.8 below. As many as 80.70% of the respondents reported that they were working. This does not include women who stated that they were not working but who were grinding food grains, stitching, teaching their children, etc. If the 10 women who are participating only in these activities are also included 84.21% of the women respondents are workers.

The estimate of workers in the age group 15 to 59 was 82.69% or 86.54 depending on whether we include the 10 women participating only in the specific activities listed above. Those contributing to work through these activities are recognized as workers by SNA 2008.

Even among those above 69 years of age, 33.33% reported that they were contributing to GDP as workers.

Age	Number of respondents	Women workers	Women workers including specified economic activities	Women not working based on col. 3	Women not working based on col. 4	Percent women workers based on col. 3	Percent women workers based on col. 4
15-59	260	215	225	45	35	82.69	86.54
60-69	22	14	14	8	8	63.64	63.64
69 & Above	3	1	1	2	2	33.33	33.33
Total	285	230	240	55	45	80.70	84.21

3.2.3. Women's Triple Burden of Work in Slums: Economic Activities, Household work and Care

Estimates presented in Table 3.9 show that 230 or 80.7% of the 285 women respondents were engaged in economic activities. The estimate increases to 240 or 84% if we include women respondents who only participate in the list of specified economic activities that are part of the SNA but are not usually included by NSS as work. 190 worked in economic activities outside the home, 51 inside the home and 85 participated in the specified list of economic activities e.g., kitchen gardening etc. in the home. In addition, almost all the women (281 out of 285 or 98.60%) were engaged in household work (domestic duties) not including care while 139 provided care to other family members.

The matrix also provides insights regarding the multiple tasks that the women engaged in together with any given task. For example, the last row of the matrix also shows that while 100% women were engaged in either economic work or household chores including care, as many as 190 worked outside the home, 51 worked inside the home, 85 participated in the specified list of economic activities e.g., kitchen gardening etc. in the home, 281 were engaged in household work (domestic duties) not including care and 139 provided care to other family members.

Similarly, the first row of the matrix shows that of the 190 worked outside the home, 11 also worked inside the home, 52 participated in the specified list of economic activities e.g., kitchen gardening etc. in the home, 188 were engaged in household work or domestic duties such as cooking, cleaning and washing dishes and clothes and 86 of them provided care to their children or elderly or ill.

 Table 3.9: Number of Women Engaged in Economic Activities, Household work and Care in the Selected Slums

	Econom	Economic Activities			Household		
				work and	Care		
	Work Outside the Home	Work Apart From Domestic Duties Inside the Home	Participation in Specified List of Eco Activities e.g. Kitchen Gardening etc. in the Home	Domestic Duties	Care	Total Economic Activities not including Specified List e.g. Kitchen Gardening etc.	Total Economic Activities, Domestic Duties and Care
Work Outside the Home	190	11	52	188	86	190	190
Work Apart From Domestic Duties Inside the Home	11	51	27	49	28	51	51
Participation in Specified List of Eco Activities in the Home	52	27	85	85	53	74	85
Domestic Duties	188	49	85	281	138	226	281
Care	86	28	53	138	139	111	139
Total Economic Activities not including Specified List e.g. Kitchen Gardening	190	51	74	226	111	230	230
Total Economic Activities, Domestic Duties and Care	190	51	85	281	139	230	285

3.2.4: Economic Activities: Domestic workers

Around one third of the 285 women who were interviewed in the selected slums, work as domestic workers in the homes of others. They sweep, wash utensils, wash clothes, dust the house, shop for vegetables, cook and take care of children and the elderly. Most domestic workers sweep the houses of others, wash their utensils and clothes while some also cook, dust,

shop and provide care. Most of them (60%) spend 4 to 8 hours on these tasks (see Table 3.10, 3.11 and 3.12 below). Their earnings depend on the number of houses and tasks they are able to cover. Payment received by the domestic workers is presented in Table 3.13.

Specific Task	Total engaged in specific task	Percent
Sweeping	81	83.51
Washing Utensils	81	83.51
Washing Clothes	58	59.79
Dusting	22	22.68
Shopping	11	11.34
Cooking	25	25.77
Child care	6	6.19
Elderly care	3	3.09
Total number of Domestic workers	97	100.00

 Table 3.10: Number of Domestic Workers doing each of the specified Tasks in the Selected Slums

		Washing	Washing				Child	Elderly
	Sweeping	Utensils	Clothes	Dusting	Shopping	Cooking	care	care
Sweeping	81	76	51	20	9	14	5	3
Utensils	76	81	54	21	11	13	6	3
Clothes	51	54	58	13	8	14	4	2
Dusting	20	21	13	22	5	6	3	2
Shopping	9	11	8	5	11	2	1	1
Cooking	14	13	14	6	2	25	3	1
Child	5	6	4	3	1	3	6	1
care								
Elderly	3	3	2	2	1	1	1	3
care								

Time Spent	No. of domestic workers	Percent	
<2	2	2.06	
2 to< 4	24	24.74	
4 to < 6	34	35.05	
6 to <8	28	28.87	
8 to <10	7	7.22	
10 to <12	2	2.06	
12 to <14			
14 and above			
N.A.			
Total	97	100.00	

 Table 3.12: Number of hours spent by Domestic Workers for paid work in different households

Table 3.13: Payment received by Domestic Workers

Payment	Karnataka	Odisha	Rajasthan	Tripura	Total
Received (in Rs.)					
<1500	1			3	4
1500 to <3000	2	5	1	8	16
3000 to <5000	2	17	4	13	36
5000 to <7000	10	11	1	1	23
7000 to <9000	8	6		1	15
9000 and above	2	1			3
Total Domestic workers	25	40	6	26	97

Note: The two respondents (in Rajasthan) who were working in 12 houses do only sweeping in all the 12 houses and earn only Rs 3000 per month (Rs 250 per household).

One respondent (in Odisha) works in 4 households and does only cooking in all the 4 households and earns Rs 10,000 per month (Rs 2500 per household).

One respondent (in Karnataka) works in 5 households. She sweeps the floors, washes utensils, washes clothes and dusts. She earns Rs 10,000 per month (Rs 2000 per household).
3.2.5 Women's Multiple Economic Activities in addition to Household Work in Slums: Main workers, Marginal Workers or Non-Workers?

Analysis of the time invested by women workers in different tasks based on estimates in Tables 3.14 and 3.15 shows that while 36.5% women work for more than 8 hours each day on economic activities outside or inside the home (not including participation in kitchen gardening etc.), another 20% work for between 6 and 8 hours and 24.35% for between 4 to 6 hours. Hence, 80.55% of the 230 women engaged in economic activities outside or inside the home (not including participation in kitchen gardening etc.), work for more than 4 hours each day on these tasks, with 86 of them reporting that they work for 8 to 14 hours per day. In addition to this, almost all the women (281 out of 285) cook, clean, wash dishes and clothes etc. in their own homes and half of them provide care. As many as 80% women spend more than 8 hours each day on economic activities and household work, with some spending as much as 12 to 14 hours or more on this combined list of tasks. **Yet women are not recognized as workers**.

All the Selected Slums Hours worked	Work Outside the Home	Work Apart From Domestic Duties Inside the Home	Participation in Specified List of Eco Activities e.g. Kitchen Gardening etc. in the Home	Domestic Duties	Care	Total Economic Activities not including Specified List e.g. Kitchen Gardening etc.	Total Economic Activities, Domestic Duties and Care
<2	10	5	65	9	55	6	2
2 to< 4	32	6	19	38	59	36	6
4 to < 6	39	17	1	132	14	56	20
6 to <8	41	15		95	2	46	28
8 to <10	61	4		7	8	75	37
10 to <12	6	3				9	50
12 to <14	1				1	1	59

 Table 3.14: Number of Women Engaged in Economic Activities, Household Activities

 Work and Care and Time Spent on Each Task in the Selected Slums

14 and above		1				1	83
Number engaged in this activity	190	51	85	281	139	230	285
Number not engaged in this activity	95	234	200	4	146	55	
Total	285	285	285	285	285	285	285

Table 3.15: Time Spent by Women in Economic Activities, Household Activities Work and Care in the Selected Slums (Percent of women reporting that they spent the stipulated time on each task)

on each task)								
All the Selected Slums Hours worked	Work Outside the Home	Duties	Participation in Specified List of Eco Activities e.g. Kitchen Gardening etc. in the Home	Domestic Duties	Care	Total Economic Activities not including Specified List e.g. Kitchen Gardening etc.	Total Economic Activities, Domestic Duties and Care	
<2	5.26	9.80	76.47	3.20	39.57	2.61	0.70	
2 to< 4	16.84	11.76	22.35	13.52	42.45	15.65	2.11	
4 to < 6	20.53	33.33	1.18	46.98	10.07	24.35	7.02	
6 to <8	21.58	29.41		33.81	1.44	20.00	9.82	
8 to <10	32.11	7.84		2.49	5.76	32.61	12.98	
10 to <12	3.16	5.88			0.00	3.91	17.54	
12 to <14	0.53	0.00			0.72	0.43	20.70	
14 and above		1.96				0.43	29.12	
Percent engaged in this activity	66.67	17.89	29.82	98.60	48.77	80.70	100.00	

Percent	33.33	82.11	70.18	1.40	51.23	19.30	0.00
not							
engaged in this activity							
Total	100.00	100.00	100.00	100.00	100.00	100.00	100.00

3.3 Women's Contribution to Economic Activities as Workers: Challenging Statistical Invisibility

The data collected from the selected villages and slums is in sharp variance with Census and NSS estimates of women workers. The data for the selected villages shows that 91% women are engaged in **economic activities** such as agriculture, animal husbandry, casual labour, running shops, etc. Additionally, as many as 68.44% women undertake **multiple economic activities** throughout the year. In sharp contrast, Census and NSS estimates of women workers are extremely low at half or a third of what is reported through detailed interviews during field work.

In addition to the fact that 91% of the women respondents in the selected villages are engaged in **economic activities**, it is important to note that 98.6% women - most of whom are also contributing through economic activities - spend several hours each day in undertaking domestic duties and care work.

Estimates presented in Table 3.9 show that out of 240 or 84% of the 285 women respondents were engaged in economic activities. 190 worked in economic activities outside and 51 inside the home. Of the 85 women who participated in the specified list of economic activities e.g., kitchen gardening etc. in the home 75 women were also engaged in other economic activities. In addition, almost all the women (281 out of 285 or 98.60%) were engaged in household work (domestic duties) not including care while 139 provided care to other family members.

Hence based on the estimates provided above, this study challenges the accuracy of **Census 2011** estimates that the workforce participation rate for females is only 25.52% for the country, 30.3% for rural areas and 15.44% for urban areas compared with corresponding estimates of 53.26%, 53.03% and 53.76% for males. It also challenges the **NSS 2011-12 estimates** that only 24.8% of females in rural areas and 14.7% of females in urban areas are workers compared with corresponding estimates of 54.3% and 54.6% for men.

In view of the above, denial of women's contribution as workers or the statistical invisibility of women workers in rural and urban areas is both inaccurate and unfair.

Non SNA activities

In addition to the economic activities listed above, women cooked, cleaned, washed dishes, washed clothes etc. in their own homes. Since own domestic work is not included in GDP, time spent on these tasks has been discussed very briefly in this Chapter.

Chapter 4

Enabling the Survival of their Families: Illustrations of Women's Work in Selected Villages and Slums

Resilience, struggle and despair are a running thread in the lives of women workers in all the selected villages and slums in the four States. There is resilience because women work, earn, enable their families to survive and additionally carrying the double and triple burden of domestic duties and care work. Despair, because despite working so hard the return is so low that they are unable to meet their household expenses. In their words (see Rajasthan slum case 5 below);

"We work so hard but the return is so low that we are not able to meet our household expenses (*Itna kaam karne pe bhi, paisa itna kam milta hai ke ghar ka kharch bhi pura nahin padta*)."

A glimpse into the lives of women's work in villages and slums is outlined below.

Rajasthan (Village)

Rajasthan Village Case 1: Her day starts at 4 a.m. so that she can complete her household duties and then work for 8 hours a day as a construction labourer

Ms G is 40 years old. She lives in Mandavari village of Phagi block in Jaipur district and belongs to Berwa caste. The family does not own any land and they do not have any domestic animals. Her husband works as a mason. She works 8 hours a day as a Beldar (construction labour).

Her day starts as early as 4 a.m. in the morning. She first cleans the house and after taking bath makes tea. Then she cooks food for the family and washes dishes and clothes. She then sends her children to school. After completing other tasks at home, she leaves for work/duty as a beldar at 8 a.m. She returns home from work in the evening at 6 p.m. and then buys vegetables and cooks food. Then she fetches drinking water and after that makes chapattis and serves food to the family. This is followed by making the beds after which she watches television and then goes to sleep at 9 p.m.

In addition to her full time work as a construction labourer, she spends 4½ hours on tasks such as buying vegetables, cooking, washing dishes and clothes, fetching water, cleaning the house etc.

along with taking care of children. She and her husband spend 8 hours once in a month for fuelwood collection.

Last year she also worked for 10 days under MGNREGA at a wage rate of Rs 160 per day.

Rajasthan Village Case 2: He accepts that his wife's contribution from their 40 bighas of land is at least half of the total agricultural output

Shri R is 60 years old and belongs to Berwa caste. He lives in Mandavari village of Phagi block in Jaipur district with his children and grand-children. The family owns 40 bighas of land - 10 bighas are irrigated and 30 bighas are un-irrigated. They have 1 buffalo, 2 calves and 2 goats. He started working as a farmer on his land and also in animal husbandry when he was 15 years of age. During the agriculture season he works for 8 hours a day for 60 days.

His wife also works with him in agriculture and animal husbandry for 9 hours a day. In agriculture she partners her husband in almost all the agricultural activities except driving the tractor. During the non-agricultural season both of them spend an hour each day to make sure that animals do not stray into their field.

While he takes the domestic animals for grazing, the rest of the animal husbandry related activities like cleaning of the shed, buying animal feed, preparation of animal feed, fetching fodder, feeding, milk processing, making of cow dung-cakes, care of new born animals and bathing of animals are performed by his wife and daughter-in-law. **He does not contribute to any domestic** activities.

He identified shortage of water and the presence of fluoride in the water that is available for drinking and irrigation in the village as the biggest problems.

He agreed that his wife's contribution was at least 50% of the total value of output from agriculture and animal husbandry.

Rajasthan Village Case 3: She is a farmer and also works in animal husbandry and as a casual labour and wants work under MGNREGA

Ms M is a 45 year old Muslim woman. She lives in Mandavari village of Phagi block, Jaipur district. Her family has 3 bighas of irrigated and 7 bighas of un-irrigated land. She and her husband farm their own land and are also **casual labourers**.

For 8 months in the year she accompanies her husband to the family fields each day. They spend one hour to check that their land is protected.

They have 2 cows and she does all the animal husbandry related activities like cleaning of the shed, buying animal feed, fetching fodder, feeding, grazing, milk processing, making cow dung-cakes etc. She spends around 5 hours each day on animal husbandry.

She also buys vegetables, cooks, washes dishes and clothes, fetches water and cleans the house. She wants to work under MGNREGA if the work is made available.

Rajasthan Village Case 4: She is 75 years old and yet she works as a casual labourer and also looks after her animals. She worries about how her children will survive in the absence of land and work

Ms S is 75 years old. She also lives in a joint family in Mandavari village of Phagi block, Jaipur district and belongs to the Bhil tribe. They came to this village 60 years ago. Her in-laws had 5 bighas of land but this was to be divided among 7 children so each child was to get less than 1 bigha each. However even though the revenue record has their name they do not have access to the land. Hence the family does not own any land and depends on casual labour for survival. Her husband is a casual labourer. Her son is also a casual labourer and is also illiterate like his parents. Fortunately, her grandchildren are studying. She also works as a casual labourer. In the past she would go to Chandigarh, Jaipur and Delhi as a construction worker. The wage in these cities was 3 to 5 times higher than that in her village so it was worth it to travel there. Even now if someone takes her for mazdoori in and around the village she goes for work. Otherwise she looks after her animals. She has 1 cow and 1 calf.

She works for 6 hours a day as a casual labourer in agriculture for 15 days in a month. Sometimes she gets work for the whole month during the agriculture season. A few years ago she had worked for 20 days under MGNREGA. She gets Rs 500 as old age pension. She wishes she had land so that her children could inherit it. She is worried about their survival. She also wants tap water in the house and wants the development of small household industries or *laghu udhyog* in the village so that income earning opportunities are locally available.

She spends 4 hours on domestic duties like buying vegetables, cooking, washing dishes and clothes, fuelwood collection, etc. on days that she does not go out for work.

Rajasthan Village Case 5: She is 72 years old and yet she works in agriculture and animal husbandry

Ms L is 72 years old. She lives in a joint family in Mandavari village of Jaipur and belongs to Berwa caste. Her family has 4 bighas of un-irrigated land. Her husband is a farmer and also works as a labourer. She works in agriculture and animal husbandry. During the agriculture season she works for around 9 hours and has been doing this work since she was 12 years old. She has two buffaloes and she cleans their shed, feeds them, takes them for grazing, makes cow dung-cakes, etc.

Apart from working in agriculture and animal husbandry, she is also involved in domestic duties like buying vegetables, serving food to the family members, washing dishes and clothes, fetching water, fuel wood etc.

She said that there is a need for safe water (*meetha pani*) for drinking and for agriculture. The water has fluoride. She has worked under MGNREGA, but wants *halka kaam* or light work under the scheme.

Rajasthan Village Case 6: She works in agriculture, spends 4.5 hours a day on animal husbandry related tasks and additionally does domestic work

Ms S1 is a 55 years old widow who belongs to Berwa caste. She lives in Mandavari village of Phagi block in Jaipur district with her children and grand-children. Her family own 2 bighas of un-irrigated land. They have 3 cows and 3 calves. She works in agriculture, casual labour and animal husbandry since childhood. She works in agriculture for 15 days and as casual labourer for another 15 days per month.

In addition, she spends 4¹/₂ hours a day in animal husbandry and does all the activities from cleaning of the shed to making of cow-dung cakes to bathing of animals and feeding. She pays a person Rs 600 per month to take the animals for grazing.

She also buys vegetables, serves food to the family members, washes dishes and clothes, fetches water, fuel wood etc. and additionally spends 1½ hour in taking care of the child. While she does agriculture work, her daughter-in-law does all the domestic work.

Rajasthan Village Case 7: She is a Beldar and would like to be a Mason but feels people won't hire a woman Mason

Ms S2 lives with her family in Mandavari village of Phagi block in Jaipur district. She has 3 sons and 2 daughters and all of them moved to Jaipur to earn. She wanted her children to get better work opportunities. Her eldest son is 26 years old and works in a private hospital. Her second son is 22 years old and is working as mason and the third one is 20 years old and is working as driver. Her daughter is 17 years old and is studying in class XII. Her in-laws are old.

She learnt Beldari 15 years ago and started going for work with her husband as a single earner cannot meet expenses and they don't have land. They needed to earn to look after their children. As a Beldar she makes a mixture of 10 bags of bajri and 1 bag of cement in water and gives it to the mason. She also learnt to put tiles and plaster the mixture. She wants to become a mason but feels that there is no possibility as most people want to hire a male mason only.

Rajasthan (Slum)

Rajasthan Slum Case 1:"Pheri work is not gulami ka kaam. It is haath ka hunar!"

Ms B is 30 years old and is a *Pheri wali* who lives in Kathputli Nagar slum in Jaipur. She exchanges steel dishes for old clothes.

She describes her work as: "*Pheri* work is not *gulami ka kaam*. It is *haath ka hunar*." Her mother told her that she will not starve if she does this work. She keeps changing the localities in which she goes to barter old clothes in exchange for steel dishes. The task requires bargaining skills.

She places the value of old clothes at only Rs 5/- for a salwar suit, Rs 10/- for a sari and Rs 10/- for a shirt and trouser. She washes the old clothes, irons them and then sells them for Rs 35/-. She spends the whole day walking in different localities in connection with her trade. She makes lunch in the morning and takes it with her. Sometimes people give her food. She says she likes the work. Her mother is also a *Pheri wali* and she learnt the trade as a child by accompanying her when she went on her rounds.

Rajasthan Slum Case 2: She makes Kathputlis so that she can run her household

Ms G is 26 years old and lives in Kathputli Nagar slum in Jaipur. She makes Kathputlis. She enjoys the work and is able to earn Rs 50/- per day for her household from this work. It keeps the house running.

She wakes up at 5 a.m., does the housework – cleans the floors, fills water, takes the children to the toilet, makes tea, washes the dishes, cooks food, eats- and then starts her Kathputli work at 9 a.m. She does this for 6 or 7 hours till 5 p.m. Then she has tea and makes food, does the dishes, gives food to everyone in the family, eats, puts the children to sleep and then restarts the Kathputli work.

Rajasthan Slum Case 3: We can eat only if we earn. We are artists but our work is not valued

Ms P is 25 years old. She also makes Kathputlis and told us about the problems faced by Kathputli makers. Their eyes get tired. The needle pricks their fingers. They have to smoothen (*ghisai*) the wood with sand-paper and this causes hardening of the skin and sores on their hands. They use scissors to cut the cloth and this causes boils (*chhala*) on their fingers.

Kamaen toh khayen. We are kalakars but hamari koi sunwayi nahin, koi keemat nahin. Aap pade likhe ho, kalam chalete ho. Hamare buzurg yahi kaam de ke gaye hain.

We can eat only if we earn. We are artists but our work is not valued.

You are educated and write with a pen. Our forefathers have left this work for us so we do this work.

Rajasthan Slum Case 4: We work so hard but the return is so low that we are not able to meet our household expenses

Ms L is 42 years old and belongs to the Bhil tribe. She lives in the Kathputli Nagar slum in Jaipur. Her husband pulls a vegetable rickshaw in the *subzi mandi* and earns Rs 150/- per day. She works as a casual labourer carrying head loads of vegetables every day for 30 days each month for 7 hours each day. She earns Rs 10 for carrying one person's vegetables. How much she earns depends on how many people hire her to carry their vegetables. Additionally, she spends 4 hours each day on domestic work.

She says: We work so hard but the return is so low that we are not able to meet our household expenses (*Itna kaam karne pe bhi, paisa itna kam milta hai ke ghar ka kharch bhi pura nahin padta*). Her main concern is that she does not have any fixed income. If she is able to work and gets work, she gets paid.

Rajasthan Slum Case 5: She works as a head loader in the Mandi for the last 25 years but has no fixed income. She gets paid only if she works

Ms S is 40 years old. She lives in Kathputli Nagar slum in Jaipur and belongs to the Scheduled Tribe. Her husband had deserted her and she works as a head loader in the Mandi for the last 25 years but has no fixed income. She gets paid only if she works.

Rajasthan Slum Case 6: She is an ASHA Sahyogini and also runs a tailoring shop

Ms S1 is 26 years old and is studying in class XII and is a scheduled caste. She lives in *Kathikon ka Mohalla* in Kathputli Nagar slum in Jaipur. Her husband is a driver who work 10 to 12 hours a day and earns Rs 10,000 per month. She is an ASHA Sahyogini in an AWC. She also runs a tailoring shop.

She says: If she can get support for her household work then she can open a beauty parlour.

Rajasthan Slum Case 7: She worked as a daily labourer (beldar) but because of her age cannot do this anymore. She now paints Kathputlis and stitches clothes for them

Ms M is 55 years old. She lives in Kathputli Nagar slum in Jaipur and is a scheduled caste. She used to work as a daily labourer (beldar) but because of her age she cannot do this anymore. She

now paints Kathputlis and stitches clothes for them. She wants a loan to buy more raw materials for Kathputli work to increase her business and profit.

Rajasthan Slum Case 8: She was a daily labourer. 35 to 40 years ago she started running a small grocery shop on the main road of the slum. She looks after her grand-children while running the shop and teaches stitching also

Ms K is 60 years old. She lives in Kathputli colony slum in Jaipur and belongs to a scheduled caste family. She runs a small grocery shop on the main street of the slum for the last 35 to 40 years. The shop was set up 40 years ago by her husband who is disabled. Initially, they were selling tea only but then they increased the size of the shop. Earlier she worked as daily labourer (beldar). Now she looks after her grand-children while runs the shop and also teaches stitching.

She says: women's struggle is more than that of men. Men are addicted to alcohol and don't work.

Odisha (Village)

Odisha Village Case 1: She works in agriculture, animal husbandry, poultry, horticulture, vegetable and mushroom cultivation and is the President of a Federation of 40 SHGs. She received the Krishi Prerna Samman in 2014

Ms A is 40 years old. She works in agriculture, animal husbandry, poultry, vegetable and mushroom cultivation and is the President of a Federation of 40 SHGs of Dadaha Panchayat. She received the Krishi Prerna Samman in 2014 for cultivating rice of the hybrid variety through SRI method with help from ICAR-CIWA. This gave her a 10% higher yield. She lives in joint family in Padasahi village of Odisha. The family has 5 acres of irrigated land and 4 cows. Her husband is a contractor and her father- in- law does not work.

In the paddy harvesting season, she gets around 150 labourers from Balasore in Mayurbhanj so that they can get work on various farms. She considers this to be social service and she serves food to them. She also helps in marketing products like flowers like marigold, Basmati rice etc. She spends 2 to 3 hours each day on animal husbandry related activities each day and takes care of her family members when they are ill.

She is involved in a range of activities for her SHG. She liaises with the Block office from where she gets seeds and oils and supplies these to SHG members. She is a member of Budhisahni SHG which supplies mid-day-meal and eggs to a school in the area. Under the ICAR-UWN project she has been given training for taking care of one day old chicks in the mother unit. Once the chicks are one month old, they are given to the 25 farm women.

Odisha Village Case 2: Anganwadi worker who works in Agriculture, Backyard Poultry, Tailoring and Knitting Teacher, SHG President and Member, Child Welfare Committee

Ms M is 38 years old. She lives in a joint family in Padasahi village of Odisha and belongs to the Scheduled Caste. The family has a cow and poultry but possess no land. Her husband is an auto driver and also a famous local folk singer. She has one daughter.

She wanted to be a teacher and got a job as a high school teacher but her father-in-law, who was a class IV employee of the Railways, did not allow her to take the job. So she started tailoring work. She made ladies blouses and earned Rs 1000 per month. In 2007, she started Naveen or new variety of rice transplantation, and vermi-composting, mushroom cultivation and backyard poultry project. Her husband joined her in this project which is based on a Multi-Agency Participatory Extension Model for improvement of livelihoods of farm women. She joined Narayan SHG in 2005 with 13 members and became President of the SHG. The SHG was started under Odisha Mission Shakti and was initially a Thrift and Credit Society that did inter-loaning at an interest rate of 3% per month inside the group and 5% per month outside the group. As tailoring was her hobby, she gave training on stitching and knitting to the SHG members and adolescent girls. She is also a member of Child Welfare Committee and Block level programme of an International Programme to support girls through coaching.

After her brother-in-law got married, in 2009, she insisted on joining the Anganwadi Centre as an Anganwadi worker. She gets an honorarium of Rs 4000 per month. Apart from her duties from 9 a.m. to 1 p.m. in the AWC where she looks after 20 children, she also works in agriculture, animal husbandry as well as maintenance of kitchen garden, pickle making, sewing and tutoring of own children. She has 50 birds in her backyard poultry and she spends around 2 hours a day in taking care of them. She prepares the compost pit, animal feed, cleans the shed, rears the chicks, sells the eggs and also supplies them for the mid-day-meal of the AWC. The family earns Rs 30,000 per year since 2014-15 under the project with support from ICAR- CIWA. Her mother-in-law looks after the cow. She spends 5 hours each day in cooking, washing dishes & clothes, fetching water from the tube-well, cleaning the house and make *vadi* for her household consumption.

Odisha Village Case 3: Auto driver and folk singer who also helps his family in agricultural activities and taking care of backyard poultry. He does not contribute to domestic chores

Shri A1 is 43 years old. He lives with his family in Padashi village of Odisha and belongs to the Scheduled Caste. He is an auto driver and a folk singer. The family has leased in 3 acres of land. M is his wife and is an AWC worker.

During the agriculture season, he is also involved in all agriculture activities related to production of rice and vegetables since last 25 years.

He helps his wife in taking care of their backyard poultry.

Odisha Village Case 4: She works in agriculture, poultry and tailoring

Ms A2 is 31 years old. She lives in a joint family in Padashi village of Odisha and belongs to the Scheduled Caste. She does tailoring for the last 7 years.

During the agricultural season she does activities like sowing, weeding, planting and transplanting, grass cutting, harvesting etc. from 9 a.m. in the morning to 5 p.m. The management and supervision of agriculture is done by her husband and brother-in-law.

She also spends around 1½ hours in cleaning of the shed and feeding of the birds in their backyard poultry. She is also involved in other economic activities inside the home like maintenance of kitchen garden and tutoring of own children.

As a member of a joint family she spends several hours each day on domestic duties like cooking, serving food, washing dishes, washing clothes, food management, and cleaning the

house. She spends 2 hours in taking care of children and an hour in taking care of her mother-inlaw.

She wants to get training as a nurse if someone can take care of her household chores.

Odisha Village Case 5: She works in agriculture, animal husbandry/poultry and is a member of an SHG

Ms N is 41 years old. She lives in a joint family in Padashi village of Odisha and belongs to a Scheduled Caste family that possesses 0.01 acres agriculture land and 0.01 acres of homestead land. The family owns 4 cows and 10 poultry. Her husband works as a mason and also works in agriculture.

She works in agriculture, animal husbandry/poultry and is a member of an SHG. In agriculture she is involved in all the activities along with other members of the family. She spends 2 hours daily during the agriculture season on sowing, weeding and other tasks. In animal husbandry she spends 2½ hours every day in cleaning of the shed, preparation of animal feed, fetching fodder, feeding, milk processing, bathing the animals, collection and selling of eggs. She is sometimes helped by her husband in these activities. She is also involved in maintenance of kitchen garden, grinding of food grains and sewing. She also contributes to economic activities outside the home as an SHG member.

She spends around 5 to 6 hours a day on domestic duties such as cooking, food management, washing dishes and clothes, cleaning, fuel wood collection, fetching water and additionally provides care.

She is interested in upgrading her skills in *vadi* and *papad* making, pickle making, sauce and jam making.

Odisha Village Case 6: He works as a Raj Mistry and also works in agriculture. He does not contribute either to Animal Husbandry or to domestic chores

Shri B is 54 years. He lives with his family in Padashi village of Odisha and belongs to a Scheduled Caste family. He owns 0.4 acres of land and leases an additional $2\frac{1}{2}$ acres. He is a mason and is also a farmer. He has been working for the last 40 years. For 25 years he made

utensils in a company and for the last 15 years he has been working 9 hours a day as a Raj Mistry in a company. He works on farming for 9 hours on days on which he does not go to work as a mason.

His wife also works with him for 2 hours a day in agricultural activities.

Although his wife said that he helps in animal husbandry, he stated that he does not contribute to animal husbandry. Similarly as far as other economic activities are concern, he is involved in maintenance of kitchen gardens only when he has time. He devotes 1 hour each a day in taking care of children and his 75 year old mother.

Odisha (Slum)

Odisha Slum Case 1: She started working as construction labour and is now a Raj mistry

Ms M is 32 years old Scheduled Tribe and lives with her family in Shanti Palli slum of Bhubaneswar in Odisha.

She is a Raj mistry (skilled casual labour) for the last 5 years and works for a contractor at a wage of Rs 250 per day. She works 7 hours a day for approximately 25 days in a month. She started working as a construction labourer 15 years ago.

She spends 3 hours each day on domestic duties like cooking, washing dishes and clothes, and cleaning of house.

Odisha Slum Case 2: She is self-employed and runs a shop in her house while also completing her household chores, stitching clothes and caring for her children

Ms L is 30 years old. She belongs to the OBC category and lives with her family in Shanti Palli slum of Bhubaneshwar in Odisha. Her husband is a carpenter. She is self-employed and runs a shop in her house that sells tea, pan, chocolates, biscuits, bread etc. She opens her shop at 5 a.m. and works there till 8 a.m. She then teaches her children from 8 a.m. to 9 a.m. and gets them ready for school. Meanwhile her husband runs the shop till 9.30 a.m. She cooks lunch for her family and then works in her shop in the afternoon from 3 p.m. to 6 p.m. Subsequently, her husband looks after the shop from 6 p.m. till 10 p.m.

She spends several hours each day cooking, washing dishes and clothes, fetching water, cleaning her house etc. Simultaneously she takes care of her children especially her son who is disabled. She also stitches clothes for her family.

Odisha Slum Case 3: She runs a tailoring shop in her home for 7½ hours a day. She also makes and sells phenyl as an SHG member. And spends 5 hours each day on domestic duties like buying vegetables, cooking, washing dishes and clothes, fetching water, cleaning house etc.

Ms S is 32 years old. She belongs to the general category and lives with her family in Shanti Palli slum of Bhubaneshwar in Odisha. Her husband is in a private job. She runs a tailoring shop in her home and works there for $7\frac{1}{2}$ hours a day. She is also involved in making and selling of phenyl as an income generation activity in an SHG. In addition to spending time on tasks like grinding of food grains and pickle making for her home she spend 5 hours each day on domestic duties like buying vegetables, cooking, washing dishes and clothes, fetching water, cleaning house etc.

Odisha Slum Case 4: She helps her husband in running the shop and makes tea while he drives the auto. All the earning from the shop goes to the husband and she says that he gives her whatever she needs

Ms P is 40 years old and belongs to a Scheduled Caste family and lives with them in Shanti Palli slum of Bhubaneshwar in Odisha. Her husband is an auto driver and the family owns a shop. She helps her husband in running the shop and makes tea while he drives the auto. All the earning from the shop goes to the husband and she says that he gives her whatever she needs. She is also a member of an SHG that stitches garments.

In addition to spending around 5 hours on domestic duties like buying vegetables, cooking, washing dishes and clothes, fetching water, cleaning house etc. she also tutors her own children.

She is interested in learning stitching but has no time as she has to look after her home and the shop.

Odisha Slum Case 5: She was a tailor but after a stomach operation was advised not to do this. She now makes *vadis* at home for 4 hours each day and supplies them to 5 hotels. During the rainy season she makes paper plates and *donas*

Ms S1 is a 37 years old widow, belongs to the General category and lives with her daughter in Shanti Palli slum of Bhubaneshwar in Odisha. She makes *vadis* at home for 4 hours each day and supplies them to 5 hotels. She makes 25 kg of *vadis* per week and sells 5 kg of *vadis* to each of the 5 hotel.

During the rainy season when she cannot make *vadi* as it won't dry, she supplements her income by getting contract work for making paper plates and *donas* for *chana masala* etc.

She also spends around 6 hours a day in activities like buying vegetables, cooking, washing dishes and clothes, fetching water, cleaning her house etc.

Earlier she was a tailor but after a stomach operation she was advised by a doctor to stop doing that.

Odisha Slum Case 6: Her husband is a *Panipuri* vendor. She prepares *panipuri*, tamarind water and other materials

Ms P1 is 48 years old. She belongs to an OBC family and lives in Shanti Palli slum of Bhubaneshwar in Odisha. Her husband is a *Panipuri* vendor.

She prepares *panipuri* for the last 10 to 12 years. In the morning she prepares *panipuri*, tamarind water etc. for about 6 hours.

She also spends 5 hours on domestic duties like cooking, washing dishes and clothes, fetching water, cleaning her house, caring for her family etc.

Odisha Slum Case 7: She works for 30 days a month as a domestic worker in 4 houses

B is 35 years old. She belongs to the SC category and lives with her family in Shanti Palli slum of Bhubaneshwar in Odisha. Her husband works as a daily labourer.

She is a domestic worker for last 15 years. She works for 4½ hours each day in 4 houses where she sweeps, mops, washes utensils and clothes. She works for 30 days in a month. If she takes 2 days of leave then her salary is reduced by Rs 50.

She also spends 5¹/₂ hours a day in her own house on domestic chores and taking care of elderly family members.

She is interested in learning tailoring, making candles and agarbattis, and how to run a shop.

Odisha Slum Case 8: She runs a fast food shop and works there for 10 hours a day from 3 am to 1 pm

Ms B1 is 60 years old. She belongs to a Scheduled Tribe family and lives with her grand-son in Shanti Palli slum of Bhubaneshwar in Odisha.

She runs a fast food shop for the last 18 years and she works there for 10 hours a day. She goes to the shop at 3 a.m. for preparing food items. She boils potatoes, makes chickpea dough, and cooks till 6 a.m. She then sells the food items from 7 a.m. to 1 p.m.

She also spends several hours each day on domestic chores such as buying vegetables, cooking, washing dishes and clothes, fetching water, cleaning house etc. and taking care of her grand-son.

Odisha Slum Case 9: She runs a tiffin shop with her family

Ms S2, her husband and son run a tiffin shop. She wakes up at 4 a.m. in the morning and for 1 hour makes batter for *pakoda, idli, vada* and *vadi*. Her husband opens the shop at 5.30 am. It is located on the main road. He closes the shop at 10 p.m. or 10.30 p.m. The shop is closed on Sunday.

She handles the shop when he comes home for lunch. The net return from the shop is Rs 400 per day and her contribution is 50% in the shop and 100% in domestic duties.

Odisha Slum Case 10: She runs a tiffin shop with her family

Ms J is helping her husband in running a road side tiffin shop. They sell *idli, upma, vada*, and *samosa*. Her husband sells the food items and she helps at the site. Out of the sale of Rs 1200 the profit is Rs 300 per day as the cost of refined oil has increased. Her contribution to the shop is 50% to 60%.

Odisha Slum Case 11: SHGs and income generation opportunities and challenges

Vichitra and Tarini are two SHGs group with 10 members each in the groups. They make phenyl and to make phenyl they mix 1 litre Pine oil, 50 ml PGM, 50 ml scent and 300 ml liquid phenyl. The material expense is Rs 600 for making 75 bottles of phenyl.

They sell phenyl by going from house to house. All the members of the group contribute each day in making phenyl. 5 members from each group make phenyl and 5 members go to sell it. It takes 1 hour for making phenyl and 2 to 4 hours to sell it.

Hospitals want to buy phenyl from them but they don't have bill or TIN number. The hospital does not want SHG stamped bills and marketing is the problem. They also face competition from Reliance which sells phenyl at Rs 65 for 3 bottles because they manufacture on a large scale and the SHGs sell at Rs 25 per bottle (Rs 75 for 3 bottles) because they manufacture on a very small scale.

Vishwamayra SHG has 14 members who make petticoats. 6 members of the group make petticoats and 6 members do marketing and 2 other works. The material cost of one petticoat is Rs 80 or 90. Around 30 or 40 petticoats are sold each month for Rs 2,500. The profit is Rs 500 per month. The group faces problems in marketing the petticoats.

6 members of the group also go for construction work at a wage rate of Rs 300 per day. Men working as Mistry get Rs 500 per day.

Tripura (Village)

Tripura Village Case 1: She says she does not work but she works all day

Ms S is 30 years old. She belongs to the OBC category and lives with her family in Sekerkote village in West Tripura district in Tripura. Her husband is a painter. The family has 2 cows, 6 poultry and 3 goats. She took a loan and bought one pig 6 months ago. The value of the pig is now Rs 10,000. She is a member of an SHG. She works in animal husbandry and also worked for 100 days under MGNREGA.

She gets up at 5 in the morning and gets her daughter ready for school. She leaves at 6 a.m. Her son leaves at 10.30 a.m. She then cleans the house. After taking her bath she goes to the kitchen and cooks. She then does her animal husbandry related work like cleaning of the shed, buying feed, preparation of animal feed, fetching fodder, feeding, milk processing, care of new born animals and bathing the cows.

She goes to get firewood once a week at 11 a.m. and returns at 2 p.m. If she doesn't go to get firewood, she cleans her house and the area surrounding her home. By 2.30 p.m. or 3 p.m. she takes her lunch and then rests for an hour. At 4 p.m. her son comes back from school and she gives him food.

She then takes the cows and goats for grazing and also takes care of the hens.

She also maintains the kitchen garden. After doing the evening *puja* (prayer), *diya* (lamp) and arti she makes the evening tiffin for the children and supervises their studies. The master comes for giving tuition to the children. She then makes dinner at 7 p.m. They eat dinner at 9 p.m. and then go to sleep.

She says she does not work but she works all day.

Tripura Village Case 2: Anganwadi Helper who works in Animal Husbandry and is President of the Thrift and Credit Society

Ms J is 39 years old. She belongs to a Scheduled Caste family and lives with them in Sekerkote village in West Tripura district in Tripura. Her husband owns a fish shop. The family does not possess any land but they have 2 cows, and 2 ducks.

She is an Anganwadi Helper and gets up 5 a.m. After having a bath she cooks breakfast and washes utensils. By 7 a.m. she leaves for the AWC. She comes back at 1.30 p.m. and serves food to other family members and eats. After washing the utensils she spends around 2 hours looking after the cows and ducks. She cleans their shed, buys and prepares their feed, feeds them, fetches fodder, processes milk, and bathes the animals.

After resting for an hour she washes clothes, fetches water and cleans the house. In the evening she lights the diya, prays and then makes tiffin. Then she makes dinner for the family. They eat the dinner by 9. 30 p.m. and sleep by 10.30 p.m.

She is also the President of the Thrift and Credit Society under SHG and took a loan of Rs 20,000 and bought a cow for Rs 15,000.

Tripura Village Case 3: She works in agriculture and has leased 2 acres of irrigated land by taking a loan from her SHG

Ms S1 is 28 years old. She belongs to a Scheduled Caste family and lives with them in Sekerkote village in West Tripura district in Tripura. Her husband is a daily wage worker. She took a loan of Rs 20,000 to take land on lease. The family has leased 2 acres of irrigated land.

She works in agriculture and in an SHG. In farming she works jointly with her husband on all the agriculture related tasks. Apart from working in agriculture, she spends around 4 hours each day on domestic duties and 3 hours every day in taking care of her children and 2 hours for teaching them.

Her mother-in-law takes care of the domestic duties when she goes out for work.

Tripura Village Case 4: She works in Animal Husbandry and takes food for her farmer husband and labourers

Ms M is 23 years old. She is a Scheduled Caste and lives with her family in Sekerkote village in West Tripura district in Tripura. Her husband is a Fisherman. The family possess ¹/₂ acre of irrigated land and 1 pig and 2 poultry. While she does not work on the farm, she prepares and takes food and water for her husband and the hired labour.

She is involved in animal husbandry and spends around 3 hours each day on activities like cleaning of the shed, buying feed, preparation of animal feed, feeding, and taking care of new born animals.

She spends around 7 hours on cooking food, serving food, washing dishes and clothes etc. and spends the whole day in taking care of her $2\frac{1}{2}$ years old daughter.

She is interested in learning tailoring.

Tripura Village Case 5: She works jointly with her husband in looking after a plant nursery

Ms A is 31 years old. She belongs to General category and lives with her family in Sekerkote village in West Tripura district in Tripura. Her husband owns a plant nursery.

She is an SHG member. She works for around 4 hours with her husband in the plant nursery in activities like watering, applying fertilizer, weeding etc.

She spends around 4 hours on domestic duties like cooking food, serving food, washing dishes and clothes etc. She spends the whole day in taking care of her 3 year old son. She is interested in training for working in a beauty parlour.

Tripura Village Case 6: She is a cook for the Mid-day Meal of a school, does Animal Husbandry and worked for 100 days under MGNREGA

Ms S2 is 35 years old. She belongs to an OBC family and lives with them in Sekerkote village in West Tripura district in Tripura. Her husband works in the office of a tea garden. The family has 2 cows, 2 pigs, 12 hens and 4 ducks. As a member of a Thrift and Credit society, she took a loan and bought 2 pigs for Rs 12,000.

She works from 6 a.m. to 10 a.m. as a cook for preparing the mid-day-meal in the kitchen of a school. She is also a member of an SHG, does animal husbandry and worked for 100 days in MGNREGA. She spends around 4½ hours each day on animal husbandry related work along with her husband in activities like cleaning of the shed, buying animal feed, preparation of animal feed, fetching fodder, feeding, milk processing, making of cow dung-cakes, care of new born animals, bathing of animals, selling cow-dung cakes and eggs etc.

She spends around 5 hours in cooking food, serving food, washing dishes and clothes, food management, fetching water from tube-well and cleaning of the house and an hour in taking care of her children.

Tripura Village Case 7: She works in agriculture, animal husbandry and casual labourer for the last 18 years and worked for 100 days in MGNREGA.

Ms L is 45 years old. She is an OBC and lives with her family in Sekerkote village in West Tripura district in Tripura. Her husband is a barber. The family possess 1 acre of irrigated land and 4 cows and 24 birds.

She works in agriculture, animal husbandry and casual labourer for the last 18 years and worked for 100 days in MGNREGA.

During the agriculture season she does activities like preparing land for cultivation, sowing and weeding, grass cutting, harvesting etc.

She spends around 4 hours in animal husbandry related activities like cleaning of the shed, buying animal feed, fetching fodder, feeding, grazing, milk processing, making cow dung-cakes etc. and 6 hours on domestic duties like cooking, washing, fetching water, cleaning etc.

Tripura (Slum)

Tripura Slum Case 1: She worked as a construction labourer from the age of 20 years up to 2014. Presently, she is not working as no work is available in the area

Ms P is 32 years old. She is an OBC and lives in Radha Nagar slum of Agartala in Tripura. Her husband is a Security supervisor in Bridge Construction Company.

She worked as a construction labourer from the age of 20 years up to 2014. Presently, she is not working as no work is available in the area.

She spends 4 hours each day in buying vegetables, cooking, washing dishes and clothes, food management and cleaning the house and spends1¹/₂ hours in taking care of children.

She is interested in learning tailoring.

Tripura Slum Case 2: She works as a Domestic worker in two houses

Ms S is 49 years old and belongs to the General category. She lives in Radha Nagar slum of Agartala in Tripura. Her husband is a casual labourer. She works as a Domestic worker. For the last 15-16 years she has worked in 2 of houses where she sweeps, mops and washes utensils and clothes.

She spends around 3 hours each day on household chores. Her daughter-in-law takes care of domestic duties when she goes out for work. She grinds foodgrains for own consumption.

Earlier she used to make sweaters and was involved in tailoring etc. but she cannot do it now due to backache.

Tripura Slum Case 3: She is studying and taking care of her small child and her mother-inlaw

Ms S1 is 22 years old, belongs to the General category and lives in Radha Nagar slum of Agartala in Tripura. Her husband is a shop-keeper. She is not working as she is studying and taking care of her small child. Sometimes her mother-in-law also needs care.

She spends 5 hours on domestic duties and also does tailoring for self and for others without any charge.

She is interested in computer work but only when her child is 4 or 5 years old.

Tripura Slum Case 4: She works as a cook

Ms B is a 45 year old widow. She belongs to a Scheduled Caste family. She lives with her family in Radha Nagar slum of Agartala in Tripura.

She is a domestic worker and cooks in a house for an hour. She wants more cooking related work although she is suffering from respiratory problems.

She spends 5 hours each day on domestic duties.

Tripura Slum Case 5: She is a home maker

Ms N is a 32 year old Muslim woman and lives with her family in Radha Nagar slum of Agartala in Tripura. Her husband is a casual labourer.

She is not physically able to work outside the house but she works 8 hours a day on domestic duties and managing the house.

She spends an hour each day on the maintenance of her kitchen garden.

Tripura Slum Case 6: She works as a casual labourer at the age of 70 and wants to learn doll making

Ms S2 is a 70 year old Muslim woman and lives with her family in Radha Nagar slum of Agartala in Tripura. Her husband is a casual labourer.

She has been working as a casual labourer under MGNREGA and TWEP for the last 6 years.

She spends 6 to 7 hours each day on domestic duties, taking care of the children and caring for her husband. She is interested in learning doll making.

Tripura Slum Case 7: She is studying and wants to become a police officer

Ms R is a 20 year old Muslim girl and lives with her parents in Radha Nagar slum of Agartala in Tripura. Her father is Band player in a Band company for weddings.

She is studying in a college and helps her mother for an hour every day by contributing to domestic duties like cooking, serving food, washing dishes, food management, and cleaning the house.

She wakes up at 7 a.m. in the morning. Then helps her mother in washing dishes, getting breakfast ready, serves food to the father, makes tea for brother and goes to college at 10 a.m.

She comes back at around 3.30 p.m. or 4 p.m. and freshens up before taking her lunch. She goes for tuition at 5 p.m. and comes back at 7.30 p.m. She studies till 10 p.m. or 11 p.m. and goes to sleep after taking her dinner. She wants to be a police officer.

Tripura Slum Case 8: She is a home maker

Ms J is 37 years old. She belongs to a Muslim family and lives with them in Radha Nagar slum of Agartala in Tripura. Her husband works as a truck-loader for a transport company.

She is not working but spends 5 hours on domestic duties like cooking, serving food, washing dishes, food management, fuel wood collection, fetching water and cleaning the house.

She also does sewing and is interested in learning tailoring, making flowers from clothes, hand fans etc. However, she cannot afford to learn tailoring as these skills requires money.

Karnataka (Village)

Karnataka Village Case 1: She is a shopkeeper and works for 8 hours each day

Ms M is 35 years old. She belongs to an OBC family and lives with them in Gungirlahalli village in Doddaballapura block of Bangalore rural district of Karnataka. The family owns one acre of un-irrigated land. Her husband works in agriculture.

She has a small business and runs a shop in which she sells vegetables and provisions for the last 15 years. She works for 8 hours a day in the shop and her husband buys the provisions for her to sell.

Initially, she took a small loan of Rs 30,000 from Stree Shakti Sangha and so far she has repaid Rs 8000.

She spends 4¹/₂ hours a day in taking care of her household chores such as cooking, washing dishes and clothes, food management, cleaning the house, grinding foodgrains etc. Fuel wood collection once a week takes 4 hours. She also takes care of her children.

She hires someone once or twice each month to take care of her domestic duties if she goes out for work.

She would like access to cheap credit. She used to work on her own 1 acre of land and also worked as coolie labour. She had a dream about this business. It took her 2 years to make the dream a reality. She got community support to start the shop. The house where the shop is located belongs to her husband.

Karnataka Village Case 2: She is a farmer, works in animal husbandry and as a casual labourer

Ms P is 21 years old and belongs to a Scheduled Tribe family. She lives with them in Gungirlahalli village in Doddaballapura block of Bangalore rural district of Karnataka. The

family possesses one acre of irrigated land and owns a cow. Her husband is disabled and is not working.

She is a farmer, works in animal husbandry and as a casual labourer. She works for 6 to 8 hours a day for 10 to 12 days per month for 12 months as a farmer on her own land. On other days she works as a casual labourer.

Additionally, she spends 2 hours a day on animal husbandry related work like cleaning of the shed, buying animal feed, fetching fodder, feeding, grazing, milk processing & selling, and making cow dung-cakes for fertilizers.

She also spends 6 hours a day on domestic chores like cooking, serving food, washing dishes and clothes, cleaning the house, etc. Twice a week she grinds food grains. She goes to collect fuel wood once a week and this takes her 4 hours. She also looks after her children and disabled husband.

She is interested in Anganwadi work but has family commitments.

Karnataka Village Case 3: She works in agriculture on her own land and in animal husbandry

Ms S is 23 years old and is an OBC who lives with her family in Gungirlahalli village in Doddaballapura block of Bangalore rural district of Karnataka. The family possesses 3 acres of irrigated land and owns a cow. Her husband is a driver.

She farms her own land and works in animal husbandry. In agriculture she works for around 8 hours a day for 20 days in a month. She spends 2 hours a day in animal husbandry related work. She also spends 6 hours each day on household chores like cooking, serving food, washing dishes and clothes, cleaning the house etc and also takes care of her children.

Karnataka Village Case 4: She works as a casual labourer and provides free midwife services

Ms S1 is a 40 year old widow. She lives with her children in Gungirlahalli village in Doddaballapura block of Bangalore rural district of Karnataka. She works as a casual labourer

for the last 9 years and renders the services of a midwife for free. She spends 8 to 10 hours a day as a casual labourer and around 4 hours as midwife as and when need arises.

She spends 5 hours on household chores like cooking, washing dishes and clothes, cleaning the house etc and also takes care of her children.

Karnataka Village Case 5: She is a farmer and additionally works in animal husbandry

Ms A is 27 years old. She belongs to a Scheduled Caste family and lives with them in Gungirlahalli village in Doddaballapura block of Bangalore rural district of Karnataka. The family possesses 1 acre of un-irrigated land and 4 poultry. Her husband is a driver and is a farmer.

She is also a farmer and additionally works in animal husbandry. Eight years ago, before her marriage she worked for 4 months in a garment company at a salary of Rs 2500 per month.

During the agriculture season, for 6 months, she spends around 8 hours in farming related activities. She also takes food for the labourers working in the field.

She spends around more than 6 hours on cooking, serving food, washing dishes and clothes, cleaning the house collecting fuel wood and taking care of children. She also grinds food grains, makes mats out of old sarees and tutors her children.

Karnataka Village Case 6: She is an Anganwadi worker and also works in animal husbandry

Ms K is 32 years old and is an OBC who lives with her family in Gungirlahalli village in Doddaballapura block of Bangalore rural district of Karnataka. The family possesses 5 acres of irrigated land, 2 cows, 1 buffalo, 7 poultry and 3 goats. Her husband is a farmer.

She is an Anganwadi worker and also works in animal husbandry. She works for 5 hours in a mini AWC and spends 3 hours a day once a week on animal husbandry related work like preparation of animal feed, fetching fodder, feeding, and making cow dung-cakes. Rest in the week her mother-in-law does the animal husbandry work.

She spends around 7 hours on domestic duties like cooking, serving food, washing dishes and clothes, food management, cleaning the house, fetching water and taking care of her children. If she goes out, her mother-in-law and relatives take care of the domestic duties.

She is interested in learning computer science and continuing her studies. She is in IInd year PUC.

Karnataka Village Case 7: She is a weaver

Ms V is 19 years old and is a weaver. She lives in Siddhanaikanahalli village in Doddaballapura block of Bangalore rural district of Karnataka. She has studied Commerce at PUC level. She learnt weaving by observing her father since she was a child and at the age of 17 years she felt that she could weave. She has independently woven saris and sold them. Her father gets yarn for weaving saris and gives back finished saris to the yarn suppliers. She gets Rs 100 only for weaving one sari. It takes 4 hours to weave one sari.

Karnataka Village Case 8: She is a weaver

Ms S lives in Siddhanaikanahalli village in Doddaballapura block of Bangalore rural district of Karnataka. Her father is a weaver and after observing him for the last 3 years, she is independently weaving saris. She weaves 12 to 14 silk polyester mix saris in a week. A sari with design takes 7 hours to weave. So she earns Rs 500 for one sari with Jacard weave and Rs 200 for a plain sari. She enjoys weaving but it is a hard work.

Karnataka Village Case 9: She is a Shopkeeper

Ms N lives in Siddhanaikanahalli village in Doddaballapura block of Bangalore rural district of Karnataka. She has just started a grocery shop with her own investment by saving money from tailoring and with some support from her husband. She decided to open the shop as there is no shop for backward castes in the area. People from general caste have their own shop. The shop is running well and money is reinvested by buying whatever people want like tea, coffee etc.

She gets up at 5.30 a.m. and by 6 a.m. she opens the shop and handles the work till her husband relieves her at 2 p.m. and sits till 10 p.m. Her mother-in-law helps her by minding shop when she gets the children ready for school.

She has also learned tailoring by taking a 6 month certificate course for which she paid a fee of Rs 500 per month for 1 hour of class a day.

Karnataka (Slum)

Karnataka Slum Case 1: She is a Coolie and also stitches mattresses

Ms L is 45 years old widow. She lives with her family in Jaibhim Nagar slum of Bengaluru in Karnataka. She works as a Coolie in construction work and has done this since the age of 11. Her work includes moulding, taking sand and making bricks for construction. Generally, she gets work for 15 days in a month.

At home she does all the household chores such as buying vegetables, cooking, washing dishes and clothes etc. She also stitches old clothes to make kowdi (mattresses). It takes two months to make one kowdi. The kowdi sells at a market price of Rs 1500. She does this for 2 hours a day on days when she does not get coolie labour work.

Karnataka Slum Case 2: She spends 8 hours a day in making dolls

Ms T is 20 years old. She belongs to a Scheduled Tribe family and lives with them in Akkipikki Colony in Bengaluru in Karnataka. Her husband is in business of Ayurvedic medicines, doll and toran making and selling.

She is also a partner in her husband's business and spends 8 hours a day in stitching dolls while other members of the family also make dolls and torans.

Additionally, she spends 4¹/₂ hours on domestic duties like buying of vegetables, cooking, washing dishes and clothes, food management, fetching water and cleaning of the house. She also grinds food grains. She is interested in learning embroidery.

Karnataka Slum Case 3: She makes Chains, Rudraksh jewellery, Dolls and Ayurvedic medicines

Ms K is 35 years old. She belongs to a Scheduled Tribe family and lives with them in Akkipikki Colony in Bengaluru, Karnataka. Her husband is in the business of selling chains, ayurvedic medicines. She makes chains from metal, rudrakash mala, stitches cloth dolls such as (dog &

monkeys etc). The ayurvedic medicines which they make include garlic oil, onion oil, rye oil, hair oil and herbal oil.

Together with her husband she sells the finished products on the footpath each week. There are different melas/ jatras etc. in the months of October and January during this time sales are brisk.

Additionally she does all the household chores like buying vegetables, cooking, washing dishes and clothes etc and takes care of her children.

Karnataka Slum Case 4: She makes and sells Dolls at the age of 65

Ms L1 is 65 years old and lives alone in Akkipikki Colony in Bengaluru, Karnataka. She makes dolls. Once a week she goes to sell the dolls. She invests Rs 2000 per week to make 40 monkey dolls. One doll is sold for Rs 20 and the cost of making it is Rs 10.

She does all her domestic work like buying vegetables, cooking, washing dishes and clothes and cleaning the house.

As she is aged, she is not interested in learning any new skill.

Karnataka Slum Case 5: She is a Fruit Vendor

Ms S is 44 years old. She belongs to an OBC family and lives in Akkipikki Colony in Bengaluru, Karnataka. Her husband is a fruits seller in the city market.

She sells fruits for the last 25 years. She buys the fruits from Electronic City and sells them in the city market. She earns a profit of Rs 500 per day through selling fruits.

She spends several hours each day in buying vegetables, cooking, serving, washing dishes and clothes etc. She does not have any spare time to learn any new skill.

Karnataka Slum Case 6: She makes and sells dolls

Ms M is a 65 year old widow who belongs to a Scheduled Tribe and lives with an unmarried son in Akkipikki Colony in Bengaluru, Karnataka.

She makes dolls for cars and has been done this for the last 20 years. She brings raw material for making dolls for Rs 1,500 and makes 40 dolls and earns a profit of Rs 10 on each doll. She goes

out only once a week to sell dolls in the market. Because of her age she has health problems and her unmarried son helps her in making and selling of dolls.

She does not do any domestic work as she eats in her other son's house for food.

Karnataka Slum Case 7: She is a Domestic Worker

Ms G is 35 years old and has 5 children. Her husband is a construction labourer. She lives in Savitribai Nagar in Bengaluru, Karnataka. She gets up at 5 in the morning and spends an hour preparing around 25 Jowar chapattis for breakfast and lunch. She prepares poha or upma for breakfast for her children. They eat 3 chapattis each at lunch. She also prepares side dishes like rasam for sambar and rice in the morning and then washes the utensils.

She leaves home for work at 7 am. She travels for an hour in a bus to reach Aladmara area near Ambedkar College where she works as domestic worker in 5 houses. She eats breakfast in one of the houses. She travels back at 3 p.m. and reaches home at 4 p.m. She then washes utensils and clothes, takes her bath and then eats. By this time it is around 6 p.m. and she has to start cooking dinner.

Karnataka Slum Case 8: She used to make Agarbattis. Due to shoulder pain she started working as a Domestic worker. Now she feels she is old and no longer works

Ms J is 60 years old. She started working at the age of 25. In the year 1975 she started making agarbattis. Her husband was not supporting her so she started making agarbattis in a factory in the day and then also at home because her kids were very small at that time. After her children started going to school she would make agarbattis and would get 50 paise for 1000 sticks. She had swelling in her shoulder due to agarbatti making. Hence she stopped making them and instead started doing domestic work in 4 houses. She did this for 5 years. She no longer works due to old age. She is now getting old age pension.

Karnataka Slum Case 9: She is a widow and was a Domestic Worker. She is not working at present as she has to look after her son

Ms B is a widow and there are 4 people in her family. She started working 6 years ago. Her husband was a driver in a private limited company. She never knew how much he earned. He did not want her to work but she had to start working when he died. She worked for 6 years as a domestic worker in 5 houses for 6 hours each day and earned a salary of Rs 6000 per month. But she has to stop working when her son met with an accident and fractured his leg during the Ganesha festival. The doctor has suggested plastic surgery but they don't have the money.

Karnataka Slum Case 10: She gives Massage, makes Dolls, Torans and Ayurvedic Medicines

Ms R is 36 years old. She has been making dolls, torans, ayurvedic medicines etc. for the last 20 years. She is a social worker for 10 years. Her husband taught her how to make dolls, torans, ayurvedic medicines, etc.

She charges Rs 500 per person for a home visit for massage. She can do massage for four persons in a day. She saves Rs 225 after meeting the cost of ayurvedic oil. She also sells ayurvedic medicines for diabetes, gas etc. If she does not have an appointment for massage she sells dolls. She goes to work at 10 a.m. and returns at 5 p.m.

She wakes up at 5.30 a.m. and washes clothes, dishes etc. She then sends her children to Degree College. Her younger son is studying in SLC. After preparing and serving breakfast etc. she leaves for work. When she comes back at 5 p.m. she washes clothes and dishes and makes food. She then watches news and does yoga and sleeps at 10.30 a.m.

Karnataka Slum Case 11: She makes Ayurvedic Medicines and Oils

Ms K wakes up at 7 a.m. cleans her house, gets water, makes food, bathes her children and sends them to school. She goes to work at 10 a.m. Her shop is on the footpath, which is 20 minutes away from her house. She makes and sells ayurvedic medicines and oils. She learnt to make ayurvedic medicines and oil a long time ago. Before her marriage she went to Kerala and learnt to make ayurvedic medicines from a Swami. She knows how to make different type of ayurvedic oils like Mahanarayan oil, lavang oil, jungle adrak oil, rye oil, mustard oil, menthol oil etc. Additionally, on Sunday she and her husband go to the Sunday market to sell the medicines and oils.

She returns home from work at 6 p.m. She then makes food, washes utensils, feeds the kids and then sleeps.

Chapter 5

Substantiating findings from field work: Evidence from NSSO publications

Correcting the Estimates of Female Workers in the Population: NSS Reports 416, 465, 550 and 559 on Participation of Women in Specified Economic Activities along with Domestic Duties

In the fifth quinquennial survey on employment and unemployment in its 50th round (1993-94) the NSSO reported information regarding participation of women in household work and other specified household activities which resulted in economic benefits to their households.⁶ Each person categorised as usually engaged in household duties in the principal status (NSS activity codes 92 and 93) was asked whether he or she pursued certain specified activities more or less regularly for household consumption along with his/her normal house chores. The usual principal status of a person who attended domestic duties only is assigned code **92**. A person who mainly attended domestic duties and was also simultaneously engaged in free collection of primary goods (vegetables, roots, firewood, cattle-feed, etc.), sewing, tailoring, weaving, making baskets and mats, etc., for household use, is assigned code **93**. Hence persons who had been assigned codes 92 and 93 as principal status were asked whether they pursued certain specified activities along with his/ her domestic duties. The answers obtained were tabulated only for females. The activities were grouped into three broad categories:

- (i) Activities relating to agricultural production like maintenance of kitchen garden, work in household poultry, dairy, etc. including free collection of agricultural products for household consumption.
- (ii) Processing of primary products produced by the households for household's consumption and
- (iii) Other activities for own consumption but resulting in economic benefits to the households.

Activities under (i) are economic activities. It is important to draw attention to the statement in NSS Report 416 that:

"Some women, however, found to be engaged only in these activities along with their

⁶National Sample Survey Organisation (1997). NSS Report No. 416: Participation of Indian Women in Household Work and other Specified Activities 1993-94. NSS 50th Round 1993-94, Department of Statistics, Government of India, New Delhi.

house chores **might not have been classified as employed** in the subsidiary status due to their non-pursual of any other economic activity in a subsidiary capacity and the activities under group (i) pursued being only nominal. **Such persons, however, could be considered to have pursued some economic activity** though nominal in nature. Activities under group (ii), according to the recommendations of an International Standard, **might be considered as economic**. NSSO, however, had not so far considered them as economic when pursued only for own consumption. **In case it is felt that these activities are to be considered as 'economic' persons pursuing these activities are also to be considered 'working'."** (emphasis added).

The Report also notes that the third category of activities is not economic when pursued for own consumption but obviously provide benefits to the households.

During **1993-94**, about 29 per cent of rural women and 42 per cent of urban women in India were usually (principal and subsidiary) engaged only in household duties. Each person categorised as usually engaged in household duties in terms of principal status was asked whether they had more or less regularly pursued the specific activities listed under categories (i) to (iii) above for household consumption also along with normal household chores. Based on their findings, NSSO noted that **58 percent of women characterised as engaged only in household work in rural areas and 14 percent in urban areas were actually** maintaining kitchen gardens, household poultry, collecting fish, collecting firewood, husking paddy, grinding food-grains, preserving meat, preparing gur, making baskets etc., or in other words they were **engaged in economic activities**. The NSSO calculates the percent of women in rural areas and **5.8 per cent** in urban areas. An upper limit of women worker population ratio, therefore, can approximately be obtained by raising the population ratio of all women workers (principal and subsidiary status) by adding to them the above proportions.

During **1999-2000**, about 30 per cent of rural women and 43 per cent of urban women in India were classified as usually engaged in household duties only, while 30 percent of rural – and 14 per cent of urban – women usually carried out some economic activity in their principal and subsidiary status. Of those women classified as usually engaged in household duties in terms of
their principal and subsidiary status, about 57 per cent in rural areas and 11 per cent in urban areas pursued one or more of the activities relating to agricultural production including free collection of agricultural products and processing of primary products produced by the households, for household's consumption. They constituted 17.3 and 4.9 per cent of women in rural and urban areas respectively."⁷

A decade later, in **2009-2010**, the worker population ratio for women, according to the usual status (considering both principal activity and subsidiary activity), was 26.1 per cent in rural and 13.8 per cent in urban areas (see Table 2.3 above and Table 4.1 below). During 2009-2010 about 40 per cent of rural females were engaged in domestic duties - about 22 per cent with activity status 92 and about 18 per cent with activity status 93. During this period, about 48 per cent of urban females were engaged in domestic duties - about 40 per cent with activity status 92 and about 18 per cent with activity status 93. During this period, about 48 per cent of urban females were engaged in domestic duties - about 40 per cent with activity status 92 and about 8 per cent with activity status 93. Among women of all ages, about **19.2 per cent in rural areas and about 8.8 per cent in urban areas pursued one or more of the activities under categories (i) and (ii) and were not considered as workers.** Hence the NSS states that:

"If all women usually engaged in economic activity, irrespective of their intensity of participation and even considering those included within the extended production boundary according to SNA-2008, are to be considered to be 'workers' to arrive at an approximate upper bound to the usual status women 'workers', then 19.2 per cent in rural areas and 8.8 per cent in urban areas, could be added to the usual status worker population ratio for women. This gives that the upper bound of the WPR of women is 45.3 per cent in rural areas and 22.6 per cent in urban areas."⁸

This problem still needs to be addressed. The 68th Round **2011-12** estimates the worker population ratio (WPR) for women of all ages, according to the usual status, (considering both principal activity and subsidiary activity), to be 24.8 per cent in rural areas and 14.7 per cent in

⁷National Sample Survey Organisation (2001). NSS Report No. 465: Participation of Indian Women in Household Work and Specified Activities 1999-2000. NSS 55th Round 1999-2000. Ministry of Statistics and Programme Implementation, Government of India, New Delhi.

⁸National Sample Survey Office (2013). NSS Report No. 550: Participation of Women in Specified Activities along with Domestic Duties. NSS 66th Round 2009-10, Ministry of Statistics and Programme Implementation, Government of India, New Delhi.

urban areas. NSSO report 559 on Participation of Women in Specified Economic Activities along with Domestic Duties (68th Round 2011-12), finds that about among women of all ages who were not workers in the subsidiary status, about 20.0 per cent in rural areas and about 6.9 per cent in urban areas pursued one or more of the activities under the broad categories (i) and (ii) that are considered as economic activities in SNA-2008. Hence based on the production boundary of SNA-2008, NSSO finds that "the approximate upper bound of worker population ratio (WPR) of women of all ages in usual status (ps+ss) are obtained as 44.8 per cent in rural areas and 21.6 per cent in urban areas."

 Table 5.1: Work Force Participation Rates: Corrected Estimates for Female Workers for selected Quinquennial Rounds

Year	Rural		Urban	
	Female	Male	Female	Male
1993-94	32.8	55.3	15.5	52.1
1993-94 corrected based on NSS report 416	32.8+17= 49.8	55.3	15.5+5.8= 21.3	52.1
1999-2000	29.9	53.1	13.9	51.8
1999-2000 corrected based on NSS Report 465	29.9+17= 46.9	53.1	13.9+4.9= 18.8	51.8
2004-05	32.7	54.6	16.6	54.9
2009-10	26.1	54.7	13.8	54.3
2009-10 corrected based on NSS Report 550	26.1+19.2= 45.3	54.7	13.8+8.8=22.6	54.3
2011-12	24.8	54.3	14.7	54.6
2011-12 corrected based on NSS Report 559	24.8+20= 44.8	54.3	14.7+6.9= 21.6	54.6

Source: NSS Reports

The corrected estimates of women's work participation for each of the NSS Rounds for which details have been mentioned above are summarised in Table 5.1 above. However, despite all these NSS reports, the next step of making the necessary corrections in the female WPR has not been taken.

In this context, Mukhopadhyay and Tendulkar⁹ also draw attention to the "relatively low level of recorded rates of labour force participation of women even when one uses the most comprehensive and gender-sensitive source of data available at the national level in this regard, i.e., data provided by the National Sample Survey Organization". They point out that the "extended participation concept makes a major difference only for the female participation rates" as "code 93 was indeed designed to capture non-market, expenditure-saving activities performed mainly by women." This code was reported much more frequently by women in the rural areas than in urban areas where most of the activities under this code are already in the commercial domain.

A submission received by the Sub Group for the Eleventh Plan on Gender and Agriculture in the context of women workers in agriculture mentioned that

"While the population Census and NSSO surveys are the most appropriate sources of information about the labour force and employment however, as a result of measurement problems, it is clear that the extent of women's participation in agricultural work can be significantly underestimated in these sources. Hence, more accurate details regarding the different categories of agricultural labour, as well as the hours worked (including gender differentials), should be obtained from these sources through the appropriate re-tabulation of the results."¹⁰

Clearly, therefore, women's work participation rates in rural and urban areas urgently need correction in view of the considerable evidence regarding inaccuracy of data pertaining to women's contribution to agriculture and allied sector activities as well as a large number of activities spanning the unorganised sector in manufacturing and services.

⁹Mukhopadhyay, Swapna and Tendulkar, Suresh D. (2006). "Gender Differences in Labour Force Participation in India: An Analysis of NSS Data," MIMAP Gender Network Project, Phase III. Sponsored by International Development Research Centre (IDRC), Canada.

¹⁰Note prepared by Dr. K Prasad Rao, DDG NSSO, for the Subgroup on Gender and Agriculture for the Eleventh Plan chaired by Aasha Kapur Mehta.

Chapter 6

Substantiating findings from field work: Evidence from the Literature¹¹

A plethora of micro studies record estimates of measurement failure. Despite clear evidence from micro studies as well as considerable efforts to sensitise the data collecting machinery, the estimates of the women workers and their economic contribution are significantly below the reality. Several attempts have been made to identify errors in measuring the number of women workers since at least the 1970s.

Jain and Chand (1982) conducted a household survey in 6 villages, 3 in Bharatpur district of Rajasthan and 3 in Birbhum district of West Bengal between September 1976 and December 1977. The total sample size was 127 households, of which 52 were in the Rajasthan villages and 75 in the West Bengal villages.¹² The critical point that needs to be noted is that the mode of investigation was observation and not recall. Each selected household was observed on two consecutive days, when the activities of every member of age 5 and above were recorded for a period of 15 hours, 6.00 a.m. to 9.00 p.m. The frequency of observation of each small household was once in two months i.e. six times during the 52 week cycle. Comparing data obtained from the Census of households and the time allocation data for the same household Jain and Chand found that:

- a) In Rajasthan four out of the 37 women who were reported as non-workers in the schedule, were in fact spending up to 4 hours a day in activities such as groundnut picking and sowing the field. 9 others who reported as non-workers were grazing cattle and cutting grass for more than one hour. Thus 13 out of 37, at least 30% were outside the questionnaire net (emphasis added). Two of the 36 male children and 2 of the 34 female children who reported as non-workers were observed to be hoeing the fields; 18 other female children were observed to be cattle grazing and cutting grass.
- b) In West Bengal, 20 out of 104 females who reported themselves as non-workers were observed to be working in activities such as winnowing, threshing and parboiling, working as

¹¹This section builds on a Background Paper prepared by Aasha Kapur Mehta for the South Asian HDR 2000 on Women and the Economy in India and on Mehta, Aasha Kapur (2000). The Invisible Workers: Women's Unrecognised Contribution to the Economy, *Manushi*, November-December.

¹²Jain, Devaki and Malini, Chand (1982). "Report on a Time Allocation Study: Its Methodological Implications," Institute of Social Studies Trust, Technical Seminar on Women's Work and Employment, April 9-11, New Delhi.

domestic servants in the homes of others for **as many as 8-10 hours per day**. This emphasises the seriousness of measurement failure.

- c) The gainful activity of females and children the tasks they engage in, its location do not get into the net cast by the existing investigation methodology, with the same precision as males.
- d) While harvesting or any other peak from income activity is going on in rural households, there is also feeding of farm hands (own and hired). The processing of grain, cooking, serving/washing involved in feeding of <u>farm hands</u> is usually done by women. This does not get counted as work.

Omvedt¹³ showed that there were a total of 239 women workers in one village and 444 workers in a second village where the 1971 Census had counted only 38 and 9 respectively.

"It is not that this work was "invisible" in any literal sense, or that it was work done in the house out of sight of Census takers. In fact, going to these villages after 10-30-11 am for survey work was impossible because the vast majority of the women were in the fields and not in their houses. Yet their work was socially invisible, the census simply did not count these women as "workers". Perhaps the greatest injustice is done to peasant women. Their "work participation" is said to be small and to be declining. Yet from the Jawari areas of Maharashtra to the rice regions of South and East India the hill economy of the north west and the Adivasi areas of South Bihar there is evidence that women work as hard or harder than men in agriculture, it is time we simply threw away the census data and recognised that a substantial portion of the field work and almost all supplementary work (care of dairy animals, grain processing) is done by women of peasant families in addition to child-care and cooking chores (emphasis added). It seems that only at the very upper levels of landholding does the male head of the family allow his wife to really withdraw from "productive" labour (that is other than purely domestic chores) oriented to farm production. Below that and depending partly on status factors - women may be withdrawn or withdraw from direct field labour, but continue to put in long hours in processing work, animal care, etc. We should conclude that in agriculture and in almost all of the unorganised sector (organised sector work data, for obvious reasons, are relatively more accurate) women work harder

¹³Omvedt, Gail (1992). "The Unorganised Sector and Women Workers," *Guru Nanak Journal of Sociology*, Vol. 13, No. 1, April. pp 19-61.

than men - particularly when all form of "subsistence production" are included - whether or not this is reflected in the census data. Above all, we can not at this point accept any generalisations regarding women's "declining work participation" as a result of overall economic trends."¹⁴

As the analysis in Chapters 3 and 4 above show, this finding is equally true today and generalisations about women's low work participation should not be accepted without in depth data collection and reliable evidence.

In an attempt at compensating for the socially generated "invisibility" of women's work, Omvedt estimated that in 1981 there were a total of **80-100 million uncounted women workers** (emphasis added).¹⁵

The Shramshakti report¹⁶ points out that although women have the dual role of reproduction and production, their contribution is considered as 'Secondary', 'Marginal' and 'Supplementary'. Even when women have to do vital preparatory work as in weaving, agriculture and pottery they are at best called "helpers". This under-valuation is all pervasive. Attributing the continued invisibility of women's work to "deeply entrenched social customs, taboos and prejudices" the Shramshakti report¹⁷ observes that **the average hours of unpaid work done by married women outside the home vary from 6.13 to 7.53 hours per day, some of them working more than 10 hours each day. Apart from domestic duties, women who are engaged in agricultural operations work on an average about 12 hours on the farm and in taking care of cattle at home (emphasis added).**

Ghosh (2013) also points out that "all women are usually workers, whether or not they are defined or recognised as such" and that the data on the labour force participation of women are notoriously inaccurate. Not only are the problems of undercounting and invisibility rife, but there are often substantial variations in data across countries which may not reflect actual differences but simply distinct methods of estimation. Further, even statistics over time are known to have

¹⁴Omvedt,Gail ibid, p. 24.

¹⁵Omvedt, Gail ibid, p. 25.

¹⁶Shramshakti (1988). Report of the National Commission on Self Employed Women and Women in the Informal Sector, June, New Delhi, p.28.

¹⁷Shramshakti (1988). ibid, p.28.

altered dramatically, as a result of changed definitions of what constitutes "economically active" or because of more probing questions put to women, or simply due to greater sensitivity on the part of the investigators¹⁸.

In the context of work participation rates in the state of Punjab, Ratna Sudarshan¹⁹ found that while the 1991 Census showed the female work force participation rate (FWPR) to be 4.4% the NCAER survey, with a probe, gave an estimate of 28.8%. Similar observations have been made in other micro studies. Referring to an inquiry into dairy development in Ambala which reported no female to be a worker in animal husbandry, Prem Chowdhary²⁰ points out that even a cursory familiarity with agriculture shows that from bringing fodder from fields, chaff cutting, preparing food mix for cattle, giving water and feed, bathing and cleaning cattle, cleaning cattle sheds, treating sick cattle, making dung cakes, storing them, making compost etc., women are very clearly allied with animal husbandry. Yet their contribution remained invisible (emphasis added).

Sardamoni²¹ draws attention to the fact that "where men and women work jointly, it was found that women got up early in the morning, cut the ripened crop and made the bundles. The men got up later and carried the bundles to the threshing yard. The women then helped in the threshing and winnowing but did not wait for the grain to be measured and payment received as they had to rush to make small purchases and cook for the night."

Therefore, where men and women work jointly, the work contributed by women gets subsumed into household activity and their contribution as workers gets invisibilised.

Mehta (1998) highlights the invisibility of women's contribution as workers in the collection of non timber forest produce (NTFP) or minor forest produce. In several states of India, tribals

¹⁸Ghosh, Jayati (2013). "Women's Work in the India in the Early 21st Century."

¹⁹Sudarshan, Ratna M. (1998). Employment of Women, Trends and Characteristics, National Seminar on in Search of New Vistas, Women's Vocational Training Programme, Directorate General of Employment and Training, New Delhi, July 30-31.

²⁰Chowdhry, Prem (1993). "High Participation, Low Evaluation Women and Work in Rural Haryana," *Economic and Political Weekly*, Vol. 28, No. 52, December 25. pp. A-140-141.

²¹Sardamoni, K. (1987). "Labour, Land and Rice Production – Women's Involvement in Three States," *Economic and Political Weekly*, Vol. 22, No. 17, April 25. p.WS 3.

collect valuable NTFP for which they receive exploitatively low returns. As can be seen from the Activity Profile and Gender wise tasks listed in Table 6.1 below, women's contribution to the collection of NTFP such as gum is significant in a large number of tasks. For instance, in order to collect gum karaya, tribal men and women walk for about 6 to 10 kilometres to reach the forest where each family has clearly earmarked trees. Women carry the basket or clear the path as they walk to the trees. Blazing or injuring the tree so as to produce gum is generally done by men. While the male member of the family blazes the trees²², the women collect leafy vegetables, twigs, tubers, shoots etc. On each visit to the forest, they collect the gum and also make fresh blazes where needed. Trips for gum collection are made three times every week. On returning to the village, women put the gum on the elevated platform for drying, ensure that the different sides of the gum dry uniformly, remove the bark, wood and other foreign matter from the gum and then grade and sort it before storing it. This process of cleaning, sorting, grading, and drying the gum takes about 4 or 5 days. It is then taken to the collection point at the shandy, where the inspector weighs it and pays for it.

Activity	Female	Male
Planting trees and forest protection	X	Х
Walk to tree	Х	Х
First blaze		XXXX
Second or third blaze	X	XXXX
Collect gum	X	х
Carry basket	X	х
Clean with forceps	XXXX	
Dry	XXXX	
Grade and sort for storage	XXXX	
Make bamboo platform		х
Travel to shandy	X	Х
Check Weight and Grade	X	XXXX
Sell or receive payment at shandy	X	Х

 Table 6.1: Activity Profile and Gender wise Tasks Performed²³

Source: Aasha Kapur Mehta, Women's Economic Empowerment in The Asia Pacific Region: Report on Gum Karaya, India submitted to UNIFEM in 2002.

²²During a field visit to Rajavomangi and discussions with women gum pickers in one village it was learnt that there was one woman (not present at the meeting) who was a widow and now blazed the trees on her own.

²³Based on discussions with Shri Vijay Kumar, Dr. M.V. Rao, Kovel and 14 women gum pickers in Kovelpuram village.

Women contribute to almost all the tasks prior to the actual weighing and receiving payment at the shandy. Yet, their contribution to the collection and processing of gum karaya remains invisible (emphasis added).²⁴

Mencher and Sardamoni²⁵ refer to the Second Agricultural Labour Enquiry Report which notes that the agricultural operations in which women were mostly employed were weeding, transplanting and harvesting and that "they were seldom employed in strenuous operations like ploughing". Questioning the assumption that all female jobs need less strength, Mencher and Sardamoni quote a comment made by a male anthropologist who reported that when he asked a man why males did not do transplanting and weeding work, he was told: "**No man can keep standing bent over all day long in the mud and rain. It is much too difficult, and our backs would hurt too much**" (emphasis added). It is well known that women transplant and weed and perform a large number of tasks that constitute "productive" economic activity.

Agrawal (2006) draws attention to the fact that "while women have always played a key role in agricultural production, their importance both as workers and as managers of farms has been growing, as an increasing number of men move to non-farm jobs. Today **53% of all male workers but 75% of all female workers, and 85% of all** *rural* **female workers, are in agriculture. Women constitute 40% of the agricultural work force and this percentage is rising. An estimated 20 percent of rural households are <u>de facto</u> female headed, due to widowhood, desertion, or male out-migration."²⁶**

Krishnaraj and Shah (2004) describe the pivotal role played by women in agriculture -

"as female agricultural labour, as farmers, co-farmers, female family labour and (with male out-migration, widowhood, etc.) as managers of farms and farm entrepreneurs. Three-fourths of women workers are in agriculture. Women work extensively in production of major grains and millets, in land preparation, seed selection and seedling

²⁴Mehta, Aasha Kapur (1998). "Sustainable Interventions for Poverty Alleviation: A Best Practice Case of Gum Karaya in Andhra Pradesh." India. New Delhi: UNIFEM; and Mehta, Aasha Kapur (1998). "Administrative Responsiveness and Competitiveness: Gum Karaya Case," *Indian Journal of Public Administration*, Vol. XLIV, No. 4, April-June.

²⁵Mencher, J.P. and K. Sardamoni (1982). "*Muddy Feet, Dirty Hands:* Rice Production and Female Agricultural Labour," *Economic and Political Weekly*, Vol. 17, No. 25, Review of Agriculture, December 25. pp. A-149-167.

²⁶Agrawal, Bina (2006). "Women's economic empowerment and the Draft Approach to the 11th Plan": Comments as Member of the 11th Plan Working Group on Land Relations.

production, sowing, applying manure, fertilizer and pesticide, weeding, transplanting, threshing, winnowing and harvesting; in livestock production, fish processing, collection of non-timber forest produce (NTFP) etc. In animal husbandry, women have multiple roles ranging from animal care, grazing, fodder collection and cleaning of animal sheds to processing of milk and livestock products. Keeping milch animals, small ruminants and backyard poultry is an important source of income for poor farm families and agricultural labourers. Landless women agricultural labourers play a pivotal role, as they are involved in most of the agricultural operations. Landless women also lease in land for cultivation. The majority of workers involved in collection of non-timber forest produce (NTFP) are women, particularly tribal women. Women also augment family resources through tasks such as collection of fuel, fodder, drinking water and water for family members and domestic animals."²⁷

While there are regional variations in the nature and extent of women's involvement in agriculture, Manjari (2014) notes that except for ploughing, there is hardly any activity in agriculture in which women are not actively involved. "About 60 per cent of the agricultural operations like sowing of seeds, transplantation of saplings, winnowing, storage of grain etc. are handled almost exclusively by women"²⁸. Similarly, women contribute significantly to vegetable cultivation. Based on a study on farm women's contribution to vegetable cultivation in Guntur District, Andhra Pradesh, she found that that the majority of the respondents were involved in almost all the activities of vegetable cultivation either independently or jointly with male members of the family. The activities predominantly performed by the farm women include sowing, intercultural operations, transplanting and preparation of vegetables for marketing as also harvesting, protection of crop from birds and animals and land preparation. Joint participation of men and women was observed in the activities such as application of manure and fertilizer, preparation of solution for spray, spray of insecticides and harvesting. However, seed

²⁷Krishnaraj, Maithreyi and Amita, Shah (2004). *Women in Agriculture*. Academic Foundation, New Delhi. Notes sent by E. Revathi, CESS, Hyderabad; V. Prameela and Nina, Bijoor (2002). "Improving the Lot of Women in Agriculture,"Sampark, Bangalore, through Solution Exchange; note from Geetha Kutty subgroup member; Aasha Kapur Mehta et al. (2004). "The Budget: A Gender and Poverty Sensitive Perspective," National Commission for Women; CP Sujaya (2006). *Climbing a Long Road*, MSSRF, Chennai as cited in Planning Commission (2007) Report of the Subgroup on Gender and Agriculture for the Eleventh Plan.

²⁸Manjari, M. Bhavya (2014). "Extent of Participation of Farm Women in Vegetable Cultivation in Guntur District of Andhra Pradesh," *Indian Journal of Science Research and Technology*, Vol. 2, No. 5. p. 39.

selection, irrigation, procurement of inputs, plant protection and selling of vegetables were mainly performed by the male members.

Studying the contribution of women to the agriculture sector, Srivastava and Srivastava (2009) found that though rural women's employment has grown over the decades, they are still largely concentrated in agriculture as self-employed or casual labour. There has been a kind of 'creeping feminisation' of agriculture; male workers have steadily moved out of agriculture (and also out of rural areas) into more diversified occupations in non-agriculture, while women have largely tended to remain in agriculture that has been largely stagnant. It is important to note that women workers rarely get the minimum wages stipulated by the government: more than 95 percent of female agricultural wage workers received wages lower than the minimum wage (NCEUS, 2007). Additionally, women workers who work as casual labourers are able to get work for only part of the year – their estimated employment days was only 184 (compared to an already low 227 for male agricultural labourers)²⁹. These are critical issues that need urgent attention.

Women also contribute to the economic survival of their families in cities through undertaking a large spectrum of tasks. While the formal sector work contributed by women is captured in the official statistics, a significant part of their contribution to economic activities in inadequately captured, especially where it is not reported or where it consists of making items that are sold by their husbands. Domestic workers and home-based workers in cities are mainly women. The most common form of domestic work done by part-time workers is sweeping and mopping, washing dishes, washing clothes, dusting, and cooking³⁰. Other forms of work, though only in a small percentage of households included chopping vegetables, washing bathrooms, folding clothes, taking care of children, ironing clothes, making dough, shopping, making rotis, doing *malish* (body massage) and preparing tea (Mehrotra 2010). However, a large proportion of women in the informal sector work as home-based workers in areas such as in embroidery,

²⁹Srivastava, Nisha and Srivastava, Ravi (2009). "Women, work, and employment outcomes in rural India."

³⁰Mehrotra, Surabhi Tandon (2010). A Report on Domestic Workers: Conditions, Rights and Responsibilities. A study of part-time domestic workers in Delhi. December. Jagori, New Delhi.

zardozi work, decorative items, etc³¹. Even when such home-based work involves all the members of the household, women perform a disproportionately larger share of that work (Mehrotra 2013). Women who live in "overcrowded slums or low income neighbourhoods that dot the urban landscape of cities across the country.... are experts at multi-tasking, in stitching garments, making craft items and processing and preparing food stuff, assembling or packaging of electronics, automobile parts and pharmaceutical products"³² and also rolling bidis and agarbattis (Sinha 2015).

What needs attention is the fact that women are at "the lowest end of a value chain, usually dealing with petty contractors, on whom they depend for supply of work, raw material and sale of finished goods. This dependence on the contractor together with the isolation undermines their ability to bargain for higher piece-rates, timely payments or overtime pay" (Srivastava and Srivastava 2009: p. 16).

Women in the informal sector in urban areas sometimes also work in trades usually undertaken by men. For instance, in Jaipur, women are also working as cobblers in order to provide financial support to the family³³. They spend 6 to 7 hours a day on this work (Verma 2011). Similarly, while the majority of street vendors are men, a study of 10 cities on street vending found that on average 30 percent of street vendors are women. The exception is Imphal, where 88.5% of street vendors are women. There are two types of vendors – those who are stationary and those who are mobile. Mobile vendors are also of two kinds: those with push carts and those who carry baskets on their heads. In cities most of the mobile vendors who carry their wares in baskets on their heads are women. The "limited size of the basket restricts the amount of goods that can be carried for sale" (Bhowmik and Saha 2012). Some of them may be fish sellers, but most of them sell vegetables. Women vendors predominate in Imphal. They come from poor backgrounds and hence, they sell vegetables and fish "as the capital required in this business is much less than that

³¹Mehrotra, Santosh, Saha, Partha, Gandhi, Ankita, Devi, Kamala and Sinha, Sharmistha (2013). "Low Female Employment in a Period of High Growth: Insights from Primary Survey in Uttar Pradesh and Gujarat." Institute of Applied Manpower Research Planning Commission, Government of India.

³²Sinha, Shalini (2015). How Women Home-Based Workers are coming together to Demand Better Rights and Protection.

³³Verma Amit, (2011). "Study of Female Cobblers' Socio-Economic Status." Centre for Civil Society, August 3

needed for non-perishable goods such as utensils and electronic goods³⁴. "However, one can witness that in any market, women would invariably sell vegetables and these also happen to be in small quantities. This indicates that women vendors have low capital for investing in their trade"³⁵. Women streets vendors in Ranchi earn less than male vendors³⁶ as they are not able to arrange loans, to invest capital and devote much time as they also have to look after small children and perform all household tasks (Banerjee 2014).

Unpaid domestic duties

There is a large volume of literature on the importance of including the unpaid domestic duties (cooking, cleaning and care) in estimates of GDP. As can be seen from the findings of pilot Time Use Survey conducted by CSO, and from the Tables in Chapter 3, these are primarily contributed by women. Stressing the double burden borne by women in the context of work, Choudhary et. al. (2009) stress the fact that typically, women's work day starts at about 5 a.m. and ends after 10 p.m. In addition to their unpaid household activities, women often spend six to eight hours per day on paid activities. When women work for free, they essentially subsidise everyone else, including businesses to government, which would not function without the "invisible" labour of women. They estimate the value of women's unpaid labour in rural and urban India to be US\$ 612.8 billion per year even when it is valued at the actual payment to maid servants³⁷.

However, unpaid household chores are not considered as economic activities by the SNA and so are not included in GDP. Hence studies on unpaid household work are not reviewed in this Report.

³⁴Bhowmik, Sharit K and Saha, Debdulal (2012). "Street Vending in Ten Cities in India." School of Management and Labour Studies. Tata Institute of Social Sciences. Mumbai. P.16

³⁵ibid. p. 17

³⁶Banerjee, Shyamali (2014). "A Study of Socio-economic condition of Vegetable Street Vendors in Ranchi," *Jharkhand Journal of Social Development*, Vol. 7, No.1 & 2.

³⁷Choudhary, Natasha, Tripathy, Asuthosh and George, Beena (2009). "Women's Economic Contribution through Their Unpaid Household Work: The Case of India." Evangelical Social Action Forum (ESAF) and Health Bridge. Nagpur. P. 32-33.

Estimates of women's contribution to GDP

There are very few attempts at estimating women's contribution to GDP. A few of these are discussed below. Kulshreshtha and Singh (1996) estimated the share of women in Net Domestic Product (NDP), i.e., GDP minus Consumption of Fixed Capital. For obtaining the share of women in the NDP they "simply allocated the aggregate contributions to NDP by various industrial categories by gender in proportion to their share in the working force. They estimated the contribution of women in the NDP to be 14 per cent in 1970-71, 16 per cent in 1980-81 and 17 per cent in 1990-91.

Raveendran $(2010 \text{ and } 2013)^{38}$ also tried to estimate the contribution of women in the formal and informal sectors by using estimation of different compilation categories as a whole at first and then apportioning it between male and female workforce proportionately. He concludes, on the basis of the size of women work force, that they contribute 23.4% of the GDP in the informal sector and 16.2 % in the formal sector in 2004-2005 with their overall GDP contribution being 19.8%.

Further discussion on the contribution of women to GDP is in Chapter 7.

6.1 Reasons for Statistical Invisibility of Women³⁹

Why is the contribution of women to the economy unrecorded or unrecognised within the framework of the national accounting system or statistically invisible? A large number of reasons have been cited in the literature for the under reporting of women's work. While some of these have been summarised in the introduction, a more detailed documentation is given below.

• Failure of the existing investigation methodology to capture the gainful activity and tasks that females and children engage in with the same precision as is done in the case of males.⁴⁰

³⁸Raveendaran, G. (2010). Contribution of Women to the National Economy. International Labour Organization. ILO Asia Pacific Working Paper Series. June. Available at: http://www.ilo.org/wcmsp5/groups/public/---asia/---ro-bangkok/---sro-new_delhi/documents/publication/wcms_146136.pdf

³⁹This section draws on Aasha Kapur Mehta (2000). "The Invisible Workers: Women's Unrecognised Contribution to the Economy," *Manushi*, November-December; and Aasha Kapur Mehta and Dolly Arora (2015). Base Paper on Availability of Data and Data Gaps for Situation Analysis of Well-being of Children and Women prepared for MOSPI and UNICEF.

⁴⁰Jain, Devaki and Chand, Malini op. cit., p.15.

- Factors such as: (i) quality and/or biases of interviewers; (ii) biases of male respondents and/or lack of knowledge on the part of proxy-respondents; (iii) poorly constructed questionnaires; (iv) ambiguous and ill-understood definitions of labour force participation.⁴¹
- Information is usually obtained from the male head of household. In a cultural setting where women's involvement in other than domestic work is considered unprestigious, this leads to an under-estimation of women's work participation in non-domestic work, especially outside the home.⁴²
- Since rural Indian women typically engage in a number of different labour force activities, each for a relatively small amount of time, classifications based on one main activity only, as is usually done at present, are inappropriate.⁴³
- The tendency of women to identify themselves as 'only housewives' even when they are economically active, reflects a common cultural pattern in large parts of the Third World. Unless questions are formalised with sufficient care there is a strong likelihood of her under-estimating the economically productive content of her work, insofar as she herself considers it a part of 'domestic duties' and reports it as such.⁴⁴
- Dominance of domestic work would lead to under-reporting of other work."⁴⁵
- Women spend several hours each day working and/or supervising work within the household. The National Income Accounts do not reflect work done within the household "due to convention and problems of measurement. Since much of the work within the household is done by women, their contribution to the economy is rendered invisible."⁴⁶
- Work styles of women are determined by history, biology, attitudes a whole package. These work styles, characterised by intermittent participation over the life cycle, as well as over a day or week; contribution to a productive activity but at the processing/premarketing, less visible monetised stage; intermingling of production for self-consumption

⁴¹Anker, Richard, Khan M.E. and Gupta, R.B. (1988). *Women's participation in the labour force: A methods test in India for improving its measurement.* ILO Series on Women, Work, and Development. Geneva: ILO. p. 1.

⁴²Agarwal, Bina (1985). "Work Participation of Rural Women in Third World: Some Data and Conceptual Biases," *Economic and Political Weekly*, Vol. 20, No. 51-52, December 21-28, p. A-156.

⁴³Anker, Richard, Khan M.E. and Gupta, R.B. op.cit., p.144.

⁴⁴Agarwal, Bina op.cit.

⁴⁵Jain, Devaki and Chand, Malini op. cit., p. 40.

⁴⁶Kulshreshtha, A.C. and Singh, Gulab (1996). "Domestic Product by Gender in the Framework of 1993 SNA," *Economic and Political Weekly*, Vol. 31, No. 51, December 21.

with production for sale, are not easy to disentangle, and the existing designs do not capture them.⁴⁷

- Women of poor rural households are routinely involved in manual work related to cultivation and processing and in addition work in the fields. Most peasant women do a significant proportion of the work involved in pre-and post-harvest operations that are done in the home compound. The working day of a poor woman in India may be from 12 to 16 hours. 'Invisibility' of women's work, domestic chores and other tasks, is part of cultural/ideological system which views man as the primary bread-winner.⁴⁸
- Women report themselves as non-workers because they tend to regard what they are engaged in as 'domestic responsibilities' and therefore outside market related or remunerated work.⁴⁹
- Indian women are engaged in two kinds of work: one that produces an income and the other that does not. The former in turn has home-based work and work outside the home. Even within the latter, there are many components that are not 'pure' domestic work like cooking, cleaning, child care but encompass post-harvest processing, livestock maintenance, gathering of fuel, fodder, water and forest produce unpaid family labour in family farm or family enterprise and so on.⁵⁰
- In the non-market sector where most women work, the distinction between economic and non-economic activities is seldom clear and most arbitrarily applied. Among the third world poor virtually all adults and sizeable numbers of children engage in 'economic activities' in order to help the family meet its basic needs; much of this work occurs outside the market place.⁵¹
- A striking example of the significant influence of perception on measurement is indicated by a small survey commissioned by UNIFEM, India, which found that 98 out of 100 enumerators did not even put the question regarding work to women; it was simply assumed by them that they did not work. In other words, out of the 2002 women in the

⁴⁷Jain, Devaki and Chand, Malini op. cit., p.40.

⁴⁸Duvvury, Nata (1989). "Women in Agriculture: A Review of Indian Literature," *Economic and Political Weekly*, Vol. 24, No. 43, October 28. p. WS-97.

⁴⁹Maithreyi, Krishnaraj (1990). "Women's Work in Indian Census: Beginnings of Change," *Economic and Political Weekly*, Vol. 25, No. 48-49, December 1-8. p. 2664.

⁵⁰Krishnaraj, ibid.

⁵¹Krishnaraj, ibid. Appendix-II.

1000 households covered, only 4 women were asked any question about the work they had done in the past one-year.⁵²

- Poor women are invariably involved in economic activities but when these are related to • family occupations like agriculture, animal husbandry, forestry, weaving, construction labour and cottage industries, their personal contribution gets merged with that of the family and becomes invisible.⁵³
- Prevailing cultural norms in which a woman doing manual work outside the house is • associated with low social status and the male head of household therefore usually identifies the woman as a housewife and non-worker.54

 ⁵²SARH and SCOPE 1996 as quoted in Ratna, Sudarshan, op. cit., p.14.
 ⁵³Shramshakti (1988) op. cit.

⁵⁴ Bina Agarwal, op.cit., and Visaria, Pravin M. (1999). "Level and Pattern of Female Employment, 1911-1994," in T.S. Papola and Alakh N. Sharma (eds.). Gender and Employment in India, New Delhi: Vikas Publishing House. p.23.

Chapter 7

Estimating women's contribution to GDP

The International System of National Accounts (SNA) 2008⁵⁵ defines Gross Domestic Product or GDP in simple terms as "the amount of value added generated by production." It also notes that certain key aggregates of the SNA, such as GDP and GDP per head of population, have acquired an identity of their own and are widely used by analysts, politicians, the press, the business community and the public at large as summary, global indicators of economic activity and welfare."⁵⁶

Data on GDP is available from CSO's National Accounts Statistics. Since the latest Census provides data on population and workforce participation for 2011 and since the latest NSS estimates of workforce participation are for Quinquennial Round 2011-12, estimates of GDP for 2011-12 have been used for estimating women's contribution to GDP. Since it was not practical to use the recall method to ask women in the villages and slums what work they were doing in 2011-12, data based on field work pertains to June to November 2016. However, in view of the findings from the detailed literature survey in Chapter 6, it is unlikely that women's workforce participation changed significantly.

A few attempts have been made to estimate women's contribution to GDP in India. The earliest among these was that by Kulshreshtha and Singh (1996). They estimated the share of women in Net Domestic Product (NDP), i.e., GDP minus Consumption of Fixed Capital. For obtaining the share of women in the NDP they "simply allocated the aggregate contributions to NDP by various industrial categories by gender in proportion to their share in the working force. They estimated the contribution of women in the NDP to be 14 per cent in 1970-71, 16 per cent in 1980-81 and 17 per cent in 1990-91. Raveendran (2010 and 2013) estimates for 2004-05 are a little higher at 19.8%.

It is important to note that due to severe data availability constraints, estimates of women's contribution to GDP provided by earlier studies, as well as those estimated in this study, are approximations at best.

⁵⁵United Nations System of National Accounts 2008 (2009). New York. p. 2.

⁵⁶ibid., p. 4.

The income approach to estimating GDP would require information on returns that accrue to the different factors of production – land, labour, capital etc. Gender based contributions to GDP could be estimated if information on wages/ salaries etc. received by male and female workers in each sector was available. However, since this data is not available it is not possible to compute it using this method.

Again, if data regarding gross value added per worker in each sector was available together with accurate information regarding the number of workers or workforce participation rates in each sector, then too it would be easier to estimate women's contribution to GDP.

In the absence of accurate information, the best that can be attempted is a series of approximations.

Method

The Kulshreshtha and Singh (1996) method was applied to try to estimate women's contribution to GDP. Industry wise or economic activity wise gross value added or GVA is available from CSO's NAS. This was multiplied by the corresponding work force participation of men and women. Two different sources were used for the workforce participation rates of men and women (i) the NSS Quinquennial Employment and Unemployment Survey 2011-12 and (ii) estimates based on field work.

NAS provides estimates of GVA for 11 major economic activities. NSS 2011-12 provides the distribution of workers according to usual status (ps+ss) for 21 industry groups. These 21 groups were compared with the 11 NAS economic activities and combined to obtain the distribution of male and female workers for the 11 NAS economic activities. Using Census 2011 population estimates for the 15 to 59 age group and NSS WPRs for the 15 to 59 age group the total number of male and female workers was estimated for each of the 11 economic activities. GVA for each economic activity/ industrial category was then apportioned between men and women in proportion to their share in the working force.

The step by step estimation of women's contribution to GDP is given below.

Step 1). Estimates of GVA for 11 major economic activities are the basis of estimation of GDP. NAS 2015 provides the GVA estimates that are presented in Table 7.1.

S. No.	Economic Activity	GVA
1	Agriculture, forestry and fishing	1505580
2	Mining and quarrying	262813
3	Manufacturing	1482158
4	Electricity, gas, water supply & other utility services	194403
5	Construction	774093
6	Trade, repair, hotels and restaurants	882957
7	Transport, storage, communication & services related to broadcasting	530163
8	Financial services	480232
9	Real estate, ownership of dwelling & professional services	1059342
10	Public administration and defence	492405
11	Other services	531398
12	Total Gross Value Added (GVA) at basic prices	8195546
	For computing Gross Domestic Product (GDP)	
1	Gross Value Added (GVA) at basic prices	8195546
2	Taxes on Products	886969
3	Less Subsidies on Products	250503
4	Gross Domestic product (GDP) (1+2-3)	8832012

Table 7.1: Gross Value Added by Economic Activity2011-12

Source: NAS 2015

Step 2). Population in the age group 15-59 was computed from the Census estimate of population in five year age groups by residence and sex (see Table 7.2).

Table 7.2: Population in the age group 15 to 59

	Males	Females	Persons
Total	375474130	354597889	730072019
Rural	247900542	236042270	483942812
Urban	127573588	118555619	246129207

Source: Computed on the basis of Census 2011 data

Step 3). Estimates of WPR for age group 15 to 59 years were used to estimate the number of male and female workers. NSS 2011-12 estimates of WPR for males and females in the age group 15 to 59 years are presented in Table 7.3 below. The NSS estimate of WPR was for this

age group were 82% for rural and 78.4% for urban males. The corresponding estimates for females were very low at 37.2% and 21% (see Table 7.3 below).

Step 4). Estimates of WPR for age group 15 to 59 years based on field work in the selected villages and slums were also used to estimate the number of male and female workers. These are also presented in Table 7.3.

Rural areas: The estimate of WPR for women in the selected villages for the age group 15 to 59 years is 94.03% or 96.52% depending on exclusion or inclusion of the specified list of activities such as grinding etc. The lower of the two estimates (without the specified list) was used.

Urban areas: The estimate of WPR for women in the selected villages for the age group 15 to 59 years is 82.69% or 86.54% depending on exclusion or inclusion of the specified list of activities such as grinding etc. The lower of the two estimates (without the specified list) was used. However, while urban areas are not limited to slums, it is likely that just as women's contribution as workers has been significantly underestimated in both villages and slums, their work in non-slum areas is also underestimated. Therefore alternate estimates of WPR for women in age group 15 to 59 years in urban areas were used. The alternate scenarios are described in Step 5 below.

Step 5). Three alternate scenarios were attempted. The WPRs for each scenario are presented in Table 7.3 below.

Scenario 1:

NSS estimates of WPR for men and women in rural and urban areas the age group 15 to 59 years were used.

Scenario 2:

- i) For men in rural areas in the age group 15 to 59 years: NSS estimates of WPR.
- ii) For women in rural areas in the age group 15 to 59 years: WPR estimated from data collected from the selected villages equal to 94.03%.
- iii) For women in urban areas in the age group 15 to 59 years: WPR estimated from data collected from the selected slums equal to 82.69%.

Scenario 3:

i) and ii) were the same as Scenario 2

iii) For women in urban areas in the age group 15 to 59 years: WPR equal to only 50% (between the 21% estimated by NSS and the 82.69% estimated for the selected slums).

Table 7.3: WPR according to usual status (ps+ss) for males and females of age 15-59 (percent) and WPR based on field work in the selected villages and slums

	Age 15 to 59	Rural	Urban	Total
1	Male WPR NSS (used in all 3 Scenarios)	82.00	78.40	80.78
2	2 Female WPR NSS Scenario 1		21.00	31.78
3	Females WPR Scenario 2	94.03	82.69	90.24
4	Females WPR Scenario 3	94.03	50.00	79.31
5	Total WPR Scenario 1	60.15	50.75	56.98
6	Total WPR Scenario 2	87.87	80.47	85.37
7	Total WPR Scenario 3	87.87	64.72	80.06

Source: Rows 2 and 3 are based on NSS Key Indicators of Employment and Unemployment in India, 2011-12.

Rows 3 and 4 are based on data collected in the villages and slums.

Rows 6, and 7 are computed from estimates of population in the age group 15 to 59 and number of workers in that age group in Table 7.4.

Step 6). The total number of male and female workers in rural and urban areas in the age group 15 to 59 was estimated based on WPRs in Table 7.3 and the Census data pertaining to male and female population in that age group. The corresponding work force participation rates are presented in Table 7.4.

 Table 7.4: Total Population and Total Workers Age 15 – 59 years (in million)

Population Age 15 to 59 years	Rural	Urban	Total
Males	247.90	127.57	375.47
Females	236.04	118.56	354.60
Persons	483.94	246.13	730.07
Workers Age 15 to 59 years			
Male workers based on NSS WPR	203.28	100.02	303.30
Female workers based on NSS WPR	87.81	24.90	112.70
Females workers scenario 2	221.95	98.03	319.98

Females workers scenario 3	221.95	59.28	281.23
Total workers	291.09	124.91	416.00
Total workers scenario 2	425.23	198.05	623.28
Total workers scenario 3	425.23	159.30	584.52

Source: Estimated based on Census population estimates, NSS WPR and field work based WPR

Step 7). As noted above in Table 7.1, NAS provides estimates of GVA for 11 major economic activities. NSS 2011-12 provides the distribution of workers according to usual status (ps+ss) for 21 industry groups. These 21 groups were compared with the 11 NAS economic activities and combined to obtain the distribution of male and female workers for the 11 NAS economic activities. This is presented in Table 7.5 below.

Table 7.5: GVA by Economic Activity and Percent Male, Female and Total Workers engaged in each economic activity (Rural + Urban)

S. No.	Economic Activity	GVA 2011-12	Male	Female	Persons
1	Agriculture, forestry and fishing	1505580	43.61	62.77	48.9
2	Mining and quarrying	262813	0.63	0.29	0.54
3	Manufacturing	1482158	12.3	13.39	12.6
4	Electricity, gas, water supply & other utility services	194403	0.62	0.25	0.52
5	Construction	774093	12.32	6.09	10.6
6	Trade, repair, hotels and restaurants	882957	13.29	4.83	10.96
7	Transport, storage, communication & services related to broadcasting	530163	6.43	0.65	4.83
8	Financial services	480232	1.05	0.52	0.91
9	Real estate, ownership of dwelling & professional services	1059342	0.26	0.02	0.2
10	Public administration and defence	492405	2.03	0.73	1.67
11	other services	531398	7.46	10.45	8.29

Step 8). The Census 2011 population estimates for the 15 to 59 age group and NSS WPRs for the 15 to 59 age group were used to estimate the total number of male and female workers engaged in each of the 11 economic activities. GVA for each economic activity/ industrial category was apportioned between men and women in proportion to their share in the working force.

Scenario 1	Industry wise workers age 15 to 59 based on NSS estimates of WPR						
Industrial Sectors	Male	Female	Persons	Women workers as % of Total Workers	GVA 2011- 12 in Rs Crore	Women's contribution to GVA in Rs Crore	
Economic Activity							
Agriculture, forestry and fishing	132.27	70.74	203.42	34.78	1505580	523574	
Mining and quarrying	1.91	0.33	2.25	14.55	262813	38237	
Manufacturing	37.31	15.09	52.42	28.79	1482158	426712	
Electricity, gas, water supply & other utility services	1.88	0.28	2.16	13.02	194403	25320	
Construction	37.37	6.86	44.10	15.56	774093	120486	
Trade, repair, hotels and restaurants	40.31	5.44	45.59	11.94	882957	105416	
Transport, storage, communication & services related to broadcasting	19.50	0.73	20.09	3.65	530163	19329	
Financial services	3.18	0.59	3.79	15.48	480232	74344	
Real estate, ownership of dwelling & professional services	0.79	0.02	0.83	2.71	1059342	28699	
Public administration and defence	6.16	0.82	6.95	11.84	492405	58312	
other services	22.63	11.78	34.49	34.15	531398	181473	
Total Work Force/ GVA	303.30	112.69	416.08	27.08	8195546	1601901	
Women's Share in GDI)					19.55	

Table 7.6: Estimating Women's contribution to GVA: Scenario 1

Scenario 2	Industry wise workers age 15 to 59 based on NSS estimates of WPR for males and field based estimates for females						
Industrial Sectors/ Economic Activity	Males based on NSS WPR	Females based on field work Scenario 2	Persons based on Scenario 2	Women workers as % of Total Workers	GVA 2011-12 in Rs Crore	Women's contribution to GVA in Rs Crore	
Agriculture, forestry and fishing	132.27	200.85	304.78	65.90	1505580	992172	
Mining and quarrying	1.91	0.93	3.37	27.57	262813	72459	
Manufacturing	37.31	42.85	78.53	54.56	1482158	808619	
Electricity, gas, water supply & other utility services	1.88	0.80	3.24	24.68	194403	47982	
Construction	37.37	19.49	66.07	29.50	774093	228320	
Trade, repair, hotels and restaurants	40.31	15.46	68.31	22.62	882957	199763	
Transport, storage, communication & services related to broadcasting	19.50	2.08	30.10	6.91	530163	36628	
Financial services	3.18	1.66	5.67	29.34	480232	140881	
Real estate, ownership of dwelling & professional services	0.79	0.06	1.25	5.13	1059342	54385	
Public administration and defence	6.16	2.34	10.41	22.44	492405	110502	
other services	22.63	33.44	51.67	64.71	531398	343891	
Total Work Force/ GVA	303.30	319.98	623.28	51.34	8195546	3035602	
Women's Share in GDP)					37.04	

Table 7.7: Estimating Women's contribution to GVA: Scenario 2

Scenario 3	Industry wise workers age 15 to 59 based on NSS estimates of WPR for males and field based estimates for females						
Industrial Sectors/ Economic Activity	Males based on NSS WPR	Females based on field work Scenario 3	Persons based on Scenario 3	Women workers as % of Total Workers	GVA 2011-12 in Rs Crore	Women's contribution to GVA in Rs Crore	
Agriculture, forestry and fishing	132.27	176.38	285.84	61.71	1505580	929066	
Mining and quarrying	1.91	0.81	3.16	25.82	262813	67850	
Manufacturing	37.31	37.63	73.65	51.09	1482158	757189	
Electricity, gas, water supply & other utility services	1.88	0.70	3.04	23.11	194403	44930	
Construction	37.37	17.11	61.96	27.62	774093	213798	
Trade, repair, hotels and restaurants	40.31	13.57	64.06	21.19	882957	187058	
Transport, storage, communication & services related to broadcasting	19.50	1.83	28.23	6.47	530163	34299	
Financial services	3.18	1.46	5.32	27.47	480232	131921	
Real estate, ownership of dwelling & professional services	0.79	0.06	1.17	4.81	1059342	50926	
Public administration and defence	6.16	2.05	9.76	21.01	492405	103473	
other services	22.63	29.36	48.46	60.60	531398	322019	
Total Work Force/ GVA	303.30	281.23	584.53	48.11	8195546	2842528	
Women's Share in GDP	1					34.68	

Table 7.8: Estimating Women's contribution to GVA: Scenario 3

Comparing the estimates

As noted in Chapter 6 and also at the start of this Chapter, Kulshreshtha and Singh (1996) estimated the share of women in Net Domestic Product (NDP). They estimated the contribution of women in the NDP to be 14 per cent in 1970-71, 16 per cent in 1980-81 and 17 per cent in

1990-91. Raveendran (2010 and 2013) estimated the overall GDP contribution of women to be 19.8%.

The contribution of women to GDP varies substantially between the three scenarios given above.

- The Scenario 1 estimate of women's contribution to GDP is 19.55%. This uses the NSS estimates of WPR for males and females. This is similar to that computed by Kulshreshtha and Gulab and by Raveendran.
- The Scenario 2 estimate of women's contribution to GDP is almost doubles to37.04%. This is based on using our field work based estimates of WPR for women in the computation.
- Even in Scenario 3 (with urban WPR truncated at 50%) our estimate of women's contribution to GDP is still far higher at 34.08% than the Kulshreshtha and Gulab and Raveendran estimates.

Chapter 8

Conclusions and Policy Recommendations

Data on workforce participation is available from the Census on a decennial basis and from the NSS large sample Rounds on a quinquennial basis. As shown in Chapter 2, across the decades, the WPR for males is **uniformly** reported to be more than 50 percent in both rural and urban areas. However, the corresponding estimates for females are **extremely low** at roughly **half** those for males in rural areas and **one-fourth** those for males in urban areas. This is inaccurate. Therefore, in order to understand the extent and nature of women's work and their contribution to GDP, in-depth interviews were conducted with 225 women in villages and 285 women in slums in Karnataka, Odisha, Rajasthan, and Tripura.

Analysis of the data collected for villages shows that:

- As many as 205 out of 225 women or (or 91% women) are contributing to GDP through working in agriculture, animal husbandry, casual labour/ construction work, tea garden labour, running shops and provision stores, tailoring, garments business, pheri work, teaching, etc. Some of them are over 70 years of age.
- If we also include those women who only participate in the specified list of economic activities e.g., grinding of food grains or kitchen gardening in the home, the estimate of women workers increases to 93%.
- Most women, i.e., 70% of the sample or 155 out of 225 respondents, are not only working but are engaged in **multiple economic activities** throughout the year.
- Only 15 out of 225 women respondents (or 6.7% women) are engaged only in domestic duties or are not contributing to GDP.

The women work as farmers and cultivators in agriculture. They are the main producers in the animal husbandry sector. They work to deliver **Government Programmes** as Anganwadi workers and helpers, teachers, workers who cook mid-day-meals in schools, village coordinators, SHG facilitators and members of income generating projects. They work at MGNREGA and other public worksites. They are agricultural and non-agricultural casual labour/ coolie labour and construction workers. They contribute to **manufacturing** by tailoring garments in factories and at home, work in printing presses, offices and hotels. They

are also engaged in petty trade by travelling from house to house (pheri work) to sell cosmetics, run grocery shops, tea shops, provision stores and earn income through **home based work** such as rolling bidis, making baskets and working as tailors.

Additionally they are also engaged in household work that is not included in GDP.

Similarly, analysis of the data collected for the slums showed that:

- As many as 230 out of 285 women (or 80.70% women) are engaged in a wide range of economic activities or activities that contribute to GDP.
- If we also include those women who **only** participate in the specified list of economic activities e.g., grinding of food grains or kitchen gardening etc. in the home the estimate of women workers increases to 84.56%.
- What is also significant is that several women are not just working on one task but are engaged in **multiple economic activities** throughout the year. For instance some of those who are domestic workers also work in income generating projects through an SHG or in a school or as construction labour.
- Only 55 out of 285 women (or 19.3% women) are engaged only in household work.

The women contribute to economic activities that are included in GDP or through working as domestic workers in other people's homes where they wash dishes and clothes and cook. They also cook in hotels and clean gyms. While some are teachers in schools or tailoring teachers or earn money through tuitions and coaching classes, one is a Lecturer in a college. Still others are peons in schools or Municipality Sweepers or work in offices. While some are unskilled casual labourers and work as head loaders and construction workers others are skilled and worked as beldars, Raj mistries, gardeners and tailors. A of them earn their living by giving body massage.

They contribute to **manufacturing** through making products such as phenyl, paper plates and cups, jewellery, dolls, chains, anklets, rudraksh and pens. Further, they also engaged in **petty trade** by travelling from house to house (pheri work) to exchange old clothes for utensils, sell bhutta (maize) or cosmetics and bangles, run fast food shops, sell meat, vegetables, fruits, grocery, tea and other provisions. They contribute to GDP through **home based work** such as making agarbattis, kathputlis and torans. They also make cloth flowers, ayurvedic medicines,

vadis, papads, pickles, golgappas (or gupchup) and in many cases sell these products on a daily or weekly basis. They work to deliver **Government Programmes** as Anganwadi workers, Anganwadi helpers, ASHA Sahyoginis, and SHG members. Some do social work. One is a rag picker while another begs for a living. In several cases they contribute to work through combining two, three or even four different areas of work each day. Clearly therefore, almost all the women who were available in the selected slums at the time of conducting the survey, are engaged in livelihood generating activities.

The data collected from the selected villages and slums is in sharp variance with Census and NSS estimates of women workers. The data for the selected villages shows that 91% of the 225 women respondents are engaged in **economic activities** such as agriculture, animal husbandry, casual labour, manufacturing, running shops, etc. Similarly 84% of the 285 women respondents in slums and related colonies are engaged in **economic activities** such as working as paid domestic workers, casual labourers, construction workers, selling fast food, making agarbattis etc. In sharp contrast, Census and NSS estimates of women workers are extremely low at half or a third of what is reported in this Study based on detailed interviews during field work.

In addition to the fact that 91% of the women respondents in the selected villages are engaged in **economic activities or tasks that contribute to GDP**, it is important to note that 212 out of 225 or 94% of them cook, clean, wash dishes and clothes etc. in their own homes. Over 50% of them spend 4 to 6 hours on these tasks while another 29% spend 6 to 8 hours each day on these non-SNA tasks.

Similarly, while 84% of the 285 women respondents in the selected slums are engaged in **economic activities or tasks that contribute to GDP**, it is important to note that 281 out of 285 of them, or 98.6% women, are engaged in household work (domestic duties) not including care, while 139 provided care to other family members.

This is succinctly explained by Sardamoni (1987) who draws attention to the fact that "where men and women work jointly, it was found that women got up early in the morning, cut the ripened crop and made the bundles. The men got up later and carried the bundles to the threshing yard. The women then helped in the threshing and winnowing but did not wait for the grain to be measured and payment received as they had to rush to make small purchases and cook for the night." Therefore, where men and women work jointly, the work contributed by women gets subsumed into household activity and their contribution as workers gets invisibilised (emphasis added).

Several NSS reports on Participation of Women in Specified Economic Activities along with Domestic Duties have found that a large number of women who are reportedly not workers in the subsidiary status are actually pursuing one or more of the activities under the specified list or broad categories that are considered as economic activities in SNA-2008. Hence based on the production boundary of SNA-2008 they found that in 2011-12 among women of all ages who were not workers in the subsidiary status, about 20.0 per cent in rural areas and about 6.9 per cent in urban areas were actually pursuing one or more of the these specified activities that are considered as economic activities in SNA-2008. Hence based on the production boundary of SNA-2008, NSSO concluded that "the approximate upper bound of worker population ratio (WPR) of women of all ages in usual status (ps+ss) are obtained as 44.8 per cent in rural areas and 21.6 per cent in urban areas."

In other words the female WPR estimates of 24.8% for rural areas should actually be 44.8% and that of 14.7% for urban areas should actually be 21.6%.

Hence, based on the estimates of women's work presented in Chapter 3, the case studies in Chapter 4, the NSS findings regarding specified economic activities that women contribute and that are missed in estimates of WPR (explained in Chapter 5) and the literature cited in Chapter 6, this study questions the accuracy of **Census 2011 estimates** that state that the workforce participation rate for females is only 25.52% for the country, 30.3% for rural areas and 15.44% for urban areas compared with corresponding estimates of 53.26%, 53.03% and 53.76% for males. It also questions the **NSS 2011-12 estimates** that only 24.8% of females in rural areas and 14.7% of females in urban areas are workers compared with corresponding estimates of 54.3% and 54.6% for males.

Clearly, therefore, women's work participation rates in rural and urban areas urgently need correction in view of the considerable evidence regarding inaccuracy of data pertaining to women's contribution to agriculture and allied sector activities as well as a large number of activities spanning the unorganised sector in manufacturing and services in both rural and urban areas. This pertains to SNA work. In view of the above, denial of women's contribution as workers or the statistical invisibility of women workers in rural and urban areas is both inaccurate and unfair and this needs to be rectified urgently.

A few attempts have been made to estimate women's contribution to GDP in India based on Census and NSS WPRs. It is important to note that due to severe data availability constraints, estimates of women's contribution to GDP provided by earlier studies as well as those estimated in this study are approximations at best.

Use of the income approach to estimating GDP requires information on returns that accrue to the different factors of production – land, labour, capital etc. This is not available. Hence, gender based contributions to GDP cannot be estimated based on the income method since gender disaggregated information on returns that accrue to the different factors of production in each sector are also not available. Therefore, it is not possible to compute women's contribution to GDP using the income method.

Again, if data regarding gross value added per worker in each sector was available together with accurate information regarding the number of workers or workforce participation rates in each sector, then too it would be easier to estimate women's contribution to GDP. In the absence of accurate information, the best that can be attempted is a series of approximations.

Kulshreshtha and Singh estimated the contribution of women in the NDP to be 14 per cent in 1970-71, 16 per cent in 1980-81 and 17 per cent in 1990-91. Raveendran's estimates of women's contribution to GDP for 2004-05 are a little higher at 19.8%.

This Study made an attempt to compute women's contribution to GDP based on three different scenarios pertaining to WPR.

Scenario 1:

NSS estimates of WPR for men and women in rural and urban areas the age group 15 to 59 years.

Scenario 2:

i) For men in rural areas in the age group 15 to 59 years: NSS estimates of WPR.

- ii) For women in rural areas in the age group 15 to 59 years: WPR estimated from data collected from the selected villages equal to 94.03%
- iii) For women in urban areas in the age group 15 to 59 years: WPR estimated from data collected from the selected slums equal to 82.69%

Scenario 3:

i) and ii) were the same as Scenario 2

iii) For women in urban areas in the age group 15 to 59 years: WPR set at only 50% (between the 21% estimated by NSS and the 82.69% estimated for the selected slums).

The estimates of women's contribution to GDP vary substantially between the three scenarios given above.

- The Scenario 1 estimate of women's contribution to GDP is **19.55%**. This uses the NSS estimates of WPR for males and females. This is similar to that computed by Kulshreshtha and Gulab and by Raveendran.
- The Scenario 2 estimate of women's contribution to GDP is almost double at **37.04%**. This is computed on the basis of our field work based estimates of WPR for women.
- Even in Scenario 3 (with urban WPR truncated at 50%) our estimate of women's contribution to GDP is still far higher at **34.08%** than the Kulshreshtha and Gulab and Raveendran estimates.

What needs attention is the fact that despite high WPRs the estimate of women's contribution to GDP is around 37%. Why is it not 50% or more? Among the reasons for this are the fact that the women workers are concentrated in areas in which **value added is relatively low**.

8.1 Recommendations

 A large number of women who contribute to economic activities such as agriculture, animal husbandry, home based work, trade and services etc. are not included as workers in Census and NSSO estimates of work participation. While Census estimates of female WPR have improved over time due to efforts at sensitizing enumerators and the stipulation in Census 2011 that all those who have worked at any time during the last year are workers, yet, the gap between WPRs estimated by NSS and the Census and those estimated through micro studies remains huge. Hence, it is recommended that before enumerators fill answers to question 15 of the Census Household Schedule B regarding work, they should ask the following questions and get an understanding of the work that women contribute.

- a) whether the household owns or operates agricultural land? If yes, then for each of the female members of the household listed in the household schedule, the enumerator must ask whether she contributes to any activities such as preparing land for cultivation, sowing, weeding, planting and transplanting, applying fertilizer, manure, pesticides, insecticides etc., watering plants/irrigation, grass cutting, pruning, plant propagation, cultivation, harvesting, threshing, dehusking, cleaning, storing, collection and storage of seeds for the next crop or overall management and supervision? All female members who contribute to any of these activities must be recorded as workers in the response to Question 15 of the Census Household schedule.
- b) whether the household has any animals or poultry? If yes, then for each of the **female** members of the household listed in the household schedule, the enumerator must ask whether she contributes to any activities such as cleaning the animal shed, buying feed, preparing the animal feed, fetching fodder, feeding the animals or taking them for grazing animals, milk processing, making cow dung-cakes, taking care of new born animals or bathing the animals? All female members who contribute to any of these activities **must be recorded as workers** in the response to Question 15 of the Census Household schedule.
- c) whether the female members of the household contribute to any home based work such as bidi rolling or making products such as vadi, papad, golgappa, dolls, torans, ayurvedic medicines etc for sale or running a provision store in the home etc? All female members who contribute to any of these activities **must be recorded as workers** in the response to Question 15 of the Census Household schedule.
- d) whether the household is engaged in collecting and processing non timber forest produce? If yes, then for each of the **female** members of the household listed in the household schedule, the enumerator must ask whether she goes to the forest to collect the NTFP or clean or process it in any way on returning from the forest? All female members who contribute to the collection and processing of NTFP **must be recorded as workers** in the response to Question 15 of the Census Household schedule.

- e) whether the **female** members of the household contribute to any way to the work that has been recorded for the male members of the family? For instance, if the husband is recorded as a golgappa seller, do the female members of the household make the golgappas? If the husband is recorded as a tea shop owner, do the female members of the household make the tea and other products that are sold in the tea shop? All female members who contribute to any of these activities **must be recorded as workers** in the response to Question 15 of the Census Household schedule.
- f) whether any of the female members of the household is a member of an SHG that is engaged in income generating activities? If so, those who are members of such SHGs that are engaged in generating income, must be recorded as workers in the response to Question 15 of the Census Household schedule.
- g) whether the household worked on an MGNREGA or other public works site? If yes, then for each of the **female** members of the household listed in the household schedule, the enumerator must ask whether she worked on an MGNREGA or other public works site? If yes, then she **must be recorded as a worker** in the response to Question 15 of the Census Household schedule.

Follow up Action: Office of the Registrar General of India

2. The section in NSS Schedule 10 on Employment and Unemployment that pertains to work starts with Block 5.1 on usual principal activity and Block 5.2 on usual subsidiary economic activity. Before administering these questions, the enumerators should ask the questions specified in 1 (a) to (g) above and get an understanding of the work that women contribute so that responses in blocks 5.1 and 5.2 are accurately completed.

Follow up Action: Ministry of Statistics and Programme Implementation

3. Additionally, women also spend several hours each day on the specific activities listed below that are economic activities and are within the production boundary of SNA - 2008. However, these tasks are not counted as work either for men or for women in the Census and NSS estimates of WPR. The Census excludes these from the categories defined as work. The NSS, however, provides estimates of women who have not been counted as workers but who are engaged in tasks such as maintenance of kitchen gardens, orchards, etc., work in

household poultry, dairy, etc., free collection of fish, small game, wild fruits, vegetables, etc. for household consumption, free collection of firewood, cow-dung, cattle feed, etc. for house consumption, husking of paddy for household consumption, grinding of foodgrains for household consumption, preparation of gur for household consumption, preservation of meat and fish for household consumption, making baskets and mats for household use, preparation of cow-dung cake for use as fuel in the household, sewing, tailoring, weaving, etc. for household use, tutoring of own children or others' children free of charge or bringing water from outside the household premises. Using this extended production boundary of SNA-2008, NSSO finds that "the approximate upper bound of worker population ratio (WPR) of women of all ages in usual status (ps+ss) are obtained as 44.8 per cent in rural areas and 21.6 per cent in urban areas." These estimates are presented in a separate report on Participation of Women in Specified Economic Activities along with Domestic Duties.

Hence, it is suggested that the production boundary be redefined so that it conforms to SNA – 2008 and these tasks, which are primarily conducted by women, should be included while estimating the worker population ratio or WPR.

Further, only women not reported as workers are asked whether they contribute to the specified economic activities listed above such as maintenance of kitchen gardens, orchards, etc. However, this question should be administered to all men and women and the time they spend on these tasks should be added to that spent on other economic activities to determine whether they are main workers or marginal workers in the Census estimates or their usual activity status is that principal or subsidiary workers in the NSS estimates.

Follow up Action: Office of the RGI and Ministry of Statistics and Programme Implementation

4. Women workers are concentrated in areas in which value added is relatively low. Those who undertake piece rate work depend on petty contractors for supply of work, raw material and sale of finished goods. In the absence of collective strength they get exploitatively low returns with no security or employment benefits. For instance, a large number of the women in a Jaipur slum are engaged in Kathputli making. Several women in a slum in Karnataka make stuffed dolls, jewellery, and torans etc. Women in slums in Odisha are engaged in *vadi*,
golgappa and *papad* making and some of the women's SHGs are also engaged in making pickles and jams. A few women of the slum were also running eatery shops. Women in Tripura were rolling bidis and tailoring.

NGOs working in slums could provide training under the Support to training and employment programme (STEP) scheme and other Government programmes to enable women to make products with improved designs that can cater to the upper end of the market. Tie ups with corporate sector for gifts or with cottage industries and haats would enable higher returns for the improved products. Women's SHGs could be facilitated in getting access to affordable credit from banks. The State/local governments can also provide spaces at convenient selling points in different markets to the SHGs where these products can be marketed. Providing spaces with crèche and toilet facilities would be gender sensitive. Therefore skills that will enhance the value of women's work and move them up the value chain need to be provided in order to enhance returns to them as well as increase the value of their contribution to GDP. NGOs and the State/local government can provide training in hygienic preparation and packaging of food items on a larger scale. The State governments can also promote these SHGs by helping them in running subsidized food canteens on the lines of Amma Unavagam in Chennai, Tamil Nadu. Therefore skills that will enhance the value of women's work and move them up the value chain need to be provided in order to increase the value of GDP as well enhance the returns them.

Follow up Action: NGOs, partners of the Skills India Mission, Ministry of Housing and Urban Poverty Alleviation, Deendayal Antyodaya Yojana (DAY) - National Urban Livelihoods Mission (NULM), DAY-NRLM.

5. A few men were also interviewed in the selected villages and slums. Men living in villages said that they work as farmers, casual labour, electricians, teachers, supervisors, shopkeepers, masons and auto drivers. Some of them contribute to a few activities in animal husbandry. During a focus group discussion in which both men and women were present, the men accepted that half the value of the agricultural output that they produced was contributed by their wives. The contribution of men to animal husbandry was limited to a few tasks. Hence, most of the value of the animal husbandry related output was contributed by women. Men living in the slums worked as sweepers, casual labour, auto drivers,

computer mechanics, tailors, electricians, office assistants and security guards etc. Only two were engaged in activities such as kathputli making or washer-men. However, **most of the men admitted that they did not contribute to household chores except to buy vegetables or help get firewood**. This needs to be explored further. Hence, a study on the relative contribution of men and women to household chores or domestic work (or non SNA work) and options for creating greater gender balance in the performance of these tasks, will be valuable.

Follow up Action: Research Study to be commissioned

6. Among the insights provided by the study is the fact that even very old women aged 75 years were working. A few young women who had small children especially in the slum in Tripura stated that they were unable to work as their children needed attention. An age cohort wise study on the contribution of women to income generating activities using both qualitative and quantitative methods will provide useful insights regarding life cycle issues in the context of women's work and the different mechanisms for support that would be enabling for them. For instance, as reported in the chapter illustrating cases, a 72 year old woman in Rajasthan said that she needed to work and wanted *halka* or light work in the village.

Follow up Action: Research Study to be commissioned

7. There is fluoride contamination of the water in Mandavri village in Phagi block of Jaipur district. This needs urgent rectification as it is affecting the health of the people living in such villages. Provision of safe drinking water is urgently needed.

Follow up Action: Ministry of Drinking Water and Sanitation, Rajasthan State Department of Drinking Water and Sanitation and the local District and sub-district authorities

8. The demand for work and concerns regarding lack of access to employment opportunities and income cut across all the villages, slums and States that were visited. Strong implementation of MGNREGA is needed. At minimum, 100 days of work for each household must be made available under MGNREGA if rural distress is to be alleviated. There is slippage in awareness regarding the right to work and in access to job cards. Awareness campaigns need to be organized at regular intervals and job cards updated as

needed. SHG groups and NRLM community resource persons can be used to raise awareness regarding the MGNREGA and also to accept and submit written demands for work.

Beyond the national commitment of 100 days work for each household through MGNREGA is the demand for training and more productive work in villages. Women in villages and slums demanded training followed by support for setting up shops or linkages with work in several areas. These include tailoring, making toys, vadis, papad, pickles, sauces and jams, paper mache, chocolate wrapping, as a mechanic, driving, poultry farming, mushroom cultivation, agriculture extension services, teacher training, adult education, construction and architectural skills, nursing, etc.

Follow up Action: Ministry of Rural Development, National Livelihoods Mission, Rural Self Employment Institutes, Ministry of Agriculture, Skills Mission, Department of Labour and Employment, KVIC.

9. A large number of women who live in slums work as domestic workers in the houses of others. There are no formal contracts or security of tenure. Minimum wages are not applied and work conditions are generally abysmal. Women working in the informal sector as coolie labour or casual labour, construction workers, piece rate workers, bidi and agarbatti rollers etc are also poorly paid, lack income security and access to health care facilities. Several women such as kathputli makers also complained of sores on their hands and tiredness of their eyes. Others complained of back pain and other health related issues emanating from the repetitive and poorly paid work that they were doing for their survival. Access to medical care can make a significant difference to their well being and must be provided. Urgent implementation of minimum wages and access to work must be prioritised.

Follow up Action: Ministry of Labour, Ministry of Health and Family Welfare

8.2 Recommendations for States, Districts and Local Authorities

8.2.1. Specific Issues needing attention in Mandavari Village, Rajasthan

10. The water is contaminated with fluoride and this needs urgent rectification as it is affecting the health of the people living there. Provision of safe drinking water is urgently needed.

Follow up Action: Ministry of Drinking Water and Sanitation, Rajasthan State Department of Drinking Water and Sanitation, the local District and sub-district authorities; and PRIs

11. There is unmet demand for work under MGNREGA as well as for other work opportunities in the village. There is also demand for light work in the village by the aged.

Follow up Action: Ministry of Rural Development, Rajasthan State Department of Rural Development

12. Several households in the village do not have toilets.

Follow up Action: Ministry of Drinking Water and Sanitation, Rajasthan State Department of Drinking Water and Sanitation and the local District and sub-district authorities; and PRIs

13. There is a demand for training in tailoring.

Follow up Action: State level Vocational Training Centres, Ministry of Skill Development and Entrepreneurship, Skill India

14. There is a demand for crop insurance to reduce income losses due to weather related variations or pest attack etc.

Follow up Action: Ministry of Agriculture and Farmers Welfare and Pradhan Mantri Fasal Bima Yojana

15. Women who are engaged in poultry farm activities want a minimum fixed price for poultry products as sometimes the price falls below cost.

Follow up Action: Department of Animal Husbandry

16. There is a demand for an Adult Education Centre in the village as this facility has been discontinued.

Follow up Action: Department of Adult Education

17. One of the women mentioned that her husband is paralysed and her daughter is mentally retarded and she needs access to medical support.

Follow up Action: Department of Health and Family Welfare, National Health Mission

8.2.2. Specific Issues needing attention in Villages in Doddaballapura, Karnataka

18. There is demand for work, for coolie or any other work.

Follow up Action: Ministry of Rural Development, Karnataka State Department of Rural Development

19. There is demand for crop insurance because when there is no rain there is loss of crop and income falls.

Follow up Action: Ministry of Agriculture and Farmers Welfare and Pradhan Mantri Fasal Bima Yojana

20. There is demand for evening school in the village.

Follow up Action: Department of Adult Education

21. There is demand for training and for entrepreneurship. The women want to learn for example tailoring and computer skills and need access to agricultural extension. While some wanted any income generation activity at the household level or through an SHG or cooperative, others wanted factory work or full time work. A few wanted to open a cloth shop or start a Garments business or a poultry farm. They also wanted access to cheap credit

Follow up Action: Vocational Training Centres, Ministry of Skill Development and Entrepreneurship, Skills Mission, DAY-NRLM, Ministry of Rural Development, Department of Animal Husbandry, KVIC

8.2.3. Specific Issues needing attention in Padasahi Village, Odisha

22. There is demand for training in Mushroom cultivation.

Follow up Action: Department of Horticulture

23. There is demand for training in agriculture related activities; support in looking after animals; poultry rearing and credit/ loan support; dairy and credit/ loan support.

Follow up Action: Ministry of Agriculture and Farmers Welfare and Department of Agriculture, Cooperation and Farmers Welfare, Odisha Livelihoods Mission, Department of Animal Husbandry, ICAR-Central Institute for Women in Agriculture, Bhubaneshwar, Odisha

24. There is demand for training for tailoring, toy making, training and other support in making, vadi, papad, pickle, sauce and jam along with raw-material and marketing. There is also demand for training in making paper mache, chocolate wrapping, starting a tailoring shop or a mechanic shop.

Follow up Action: Odisha Livelihoods Mission, Rural Self Employment Institute, Government of Odisha, ICAR-Central Institute for Women in Agriculture, Bhubaneshwar, Odisha; KVIC

25. She is suffering from blindness and wants training in tailoring so that she can work from home.

Follow up Action: Rehabilitation Council of India. National Institute for the Empowerment of Persons with Visual Disabilities, Odisha Department of Social Security and Empowerment of Persons with Disabilities (Divyangjan), Ministry of Social Justice and Empowerment

26. There is demand for teaching primary level children and for teacher training.

Follow up Action: Department of HRD, Department of School and Mass Education, Government of Odisha

27. There is demand for work under MGNREGA.

Follow up Action: Department of Rural Development, Ministry of Rural Development and Rural Development Department, Odisha

28. There is demand for regular full time labour work as access to work is irregular.

Follow up Action: Department of Labour and Employment, Government of Odisha, Odisha Livelihoods Mission, Rural Self Employment Institute, Government of Odisha

29. There is demand for Training in Nursing.

Follow up Action: Ministry of Health and Family Welfare, Directorate of Medical Education and Training, Government of Odisha

30. There is demand for Training in construction work and architecture related work.

Follow up Action: Construction Workers Federation of India, Construction Industry Development Council, Odisha Department of Labour and Employment

8.2.4. Specific Issues needing attention in Sekerkote Village, Tripura

31. There is demand for work. While some women want support to open a beauty parlour, others want bidi rolling work at home or want to learn tailoring and stitching as well or support to get a job as industrial labour.

Follow up Action: Vocational Training Centres, Ministry of Skill Development and Entrepreneurship, Skills Mission, DAY-NRLM, Ministry of Rural Development

8.3.1. Specific Issues needing attention in Kathputli Colony Slum, Jaipur, Rajasthan

32. While a few women stated that they want funds to open a shop, others are running a shop and want to increase the size of the shop. There is demand for additional work.

Follow up Action: Ministry of Housing and Urban Poverty Alleviation, Deendayal Antyodaya Yojana (DAY) - National Urban Livelihoods Mission (NULM). Local Bodies Department, Government of Rajasthan

33. Women who are engaged in Kathputli making get very low prices for the Kathputlis as there

is no organized selling point and market for them. There is demand for credit to buy more

raw materials to increase the scale of work and profit.

Follow up Action: Ministry of Housing and Urban Poverty Alleviation, Deendayal Antyodaya Yojana (DAY) - National Urban Livelihoods Mission (NULM). Local Bodies Department, Government of Rajasthan. National Scheduled Castes Finance and Development Corporation, Jaipur Development Authority and Department of Women and Child Development, Government of Rajasthan. Cottage Industries Exposition Limited

34. There is a concern that despite working so hard the return is low and it is difficult to meet expenses. Since they are not regular employees, they get paid only if they get work.

Follow up Action: Ministry of Housing and Urban Poverty Alleviation, Deendayal Antyodaya Yojana (DAY) - National Urban Livelihoods Mission (NULM). Local Bodies Department, Government of Rajasthan

35. Women who are working as safai karamcharis on contractual basis are paid less than those who are working as permanent safai karamcharis.

Follow up Action: Ministry of Women and Child Development and Jaipur Municipal Corporation

36. Some of the drains in the slum are over flowing and some areas of the slum are not cleaned regularly.

Follow up Action: Jaipur Municipal Corporation

37. The husband of one of the women is handicapped and cannot walk. She needs access to medical facilities for him.

Follow up Action: Department of Empowerment of Persons with Disabilities (Divyangjan), Ministry of Social Justice and Empowerment. Rehabilitation Council of India. Special Employment Exchange for Physically Handicapped, Jaipur

8.3.2. Specific Issues needing attention in Savitribai Nagar, Jaibhim Nagar and Akkipikki Colony in Bengaluru, Karnataka

38. There is demand for learning stitching, basket weaving, making papad and packing food, as well as making agarbattis, candles and dolls.

Follow up Action: Karnataka State Women's Development Corporation

39. There is demand for learning car driving and becoming a driver.

Follow up Action: Karnataka State Women's Development Corporation. Directorate of Employment and Training, Karnataka, Skill India Mission

40. There is demand for learning tailoring and support for running a canteen.

Follow up Action: Karnataka State Women's Development Corporation

41. There is a demand for support for opening shop like a massage center, mobile shop, currency exchange shop, saree design opening a xerox shop, textiles shop, tailoring shop, beauty parlour, tailoring shop, tea shop, running a canteen, opening a hotel, and selling vegetables.

Follow up Action: Ministry of Housing and Urban Poverty Alleviation, Deendayal Antyodaya Yojana (DAY) - National Urban Livelihoods Mission (NULM). Directorate of Municipal Administration, Government of Karnataka. Department of Skill Development Karnataka

42. There is a demand for support for improving the marketing and sale of ayurvedic medicines.

Follow up Action: Ministry of AYUSH and Karnataka State Government, Department of AYUSH. Ministry of Housing and Urban Poverty Alleviation, Deendayal Antyodaya Yojana (DAY) - National Urban Livelihoods Mission (NULM). Directorate of Municipal Administration, Government of Karnataka. Department of Skill Development Karnataka

8.3.3. Specific Issues needing attention in Shantipalli Slum, Odisha

43. There is a demand for training and support for making vadi papad at home and for support in marketing the products individually and through SHGs.

Follow up Action: Ministry of Housing and Urban Poverty Alleviation, Deendayal Antyodaya Yojana (DAY) - National Urban Livelihoods Mission (NULM). Housing and UD Department, Government of Odisha. Department of Women & Child Development and Mission Shakti to facilitate SHG related activities.

8.3.4. Specific Issues needing attention in Radha Nagar Slum, Tripura

44. There is demand for learning tailoring and sewing, book binding, making flowers, doll making, hand-made fans, pickle making, any vocational work, computer work, cooking related work.

Follow up Action: Ministry of Micro, Small and Medium Enterprises. Directorate of Skill Development, Department of Industries and Commerce, Government of Tripura

45. There is demand for industrial Labour work.

Follow up Action: Directorate of Skill Development, Department of Industries and Commerce, Government of Tripura, Construction Workers Federation of India, Construction Industry Development Council/Ministry of Labour

46. There is demand for opening a Beauty Parlour, for setting up a shop for selling flowers and hand-made fans and credit support for this.

Follow up Action: Directorate of Skill Development, Department of Industries and Commerce, Government of Tripura.

References

Agarwal, Bina (2006). "Women's economic empowerment and the Draft Approach to the 11th Plan," Comments as Member of the 11th Plan Working Group on Land Relations.

Agarwal, Bina (1985). "Work Participation of Rural Women in Third World: Some Data and Conceptual Biases," *Economic and Political Weekly*, Vol. 20, No. 51-52, December 21-28, p. A-156.

Anker, Richard, Khan, M.E. and Gupta, R.B. (1988). "Women's participation in the labour force: A methods test in India for improving its measurement," ILO Series on Women, Work, and Development. Geneva: ILO. p. 1.

Banerjee, Shyamali (2014). "A Study of Socio-economic condition of Vegetable Street Vendors in Ranchi," *Jharkhand Journal of Social Development*, Vol. 7, No.1 & 2.

Bhowmik, Sharit K and Saha, Debdulal (2012). "Street Vending in Ten Cities in India." School of Management and Labour Studies. Tata Institute of Social Sciences. Mumbai.

Central Statistics Organisation (2016). National Accounts Statistics - 2015. Ministry of Statistics and Programme Implementation. Government of India. New Delhi.

Choudhary, Natasha, Tripathy, Asuthosh and George, Beena (2009). "Women's Economic Contribution through Their Unpaid Household Work: The Case of India." Evangelical Social Action Forum (ESAF) and Health Bridge. Nagpur.

Chowdhry, Prem (1993). "High Participation, Low Evaluation Women and Work in Rural Haryana," *Economic and Political Weekly*, Vol. 28, No. 52, December 25. pp. A-140-141.

Das, Sonali, Jain-Chandra, Sonali, Kochhar, Kalpana and Kumar, Naresh (2015). "Women Workers in India: Why So Few Among So Many?" IMF Working Paper. Available at: https://www.imf.org/external/pubs/ft/wp/2015/wp1555.pdf

Duvvury, Nata (1989). "Women in Agriculture: A Review of Indian Literature," *Economic and Political Weekly*, Vol. 24, No. 43, October 28. p. WS-97.

Ghosh, Jayati (2013). "Women's Work in the India in the Early 21st Century." Available at: <u>http://www.sundarayya.org/sites/default/files/papers/jayati.pdf</u>

Jain, Devaki and Chand, Malini (1982). "Report on a Time Allocation Study: Its Methodological Implications," Institute of Social Studies Trust, Technical Seminar on Women's Work and Employment, April 9-11, New Delhi.

Krishnaraj, Maithreyi and Shah, Amita (2004). "Women in Agriculture." Academic Foundation, New Delhi.

Krishnaraj, Maithreyi (1990). "Women's Work in Indian Census: Beginnings of Change," *Economic and Political Weekly*, Vol. 25, No. 48-49, December 1-8. p. 2664.

Kulshreshtha, A.C. and Singh, Gulab (1996). "Domestic Product by Gender in the Framework of 1993 SNA," *Economic and Political Weekly*, Vol. 31, No. 51, December 21.

Manjari, M. Bhavya (2014). "Extent of Participation of Farm Women in Vegetable Cultivation in Guntur District of Andhra Pradesh," *Indian Journal of Science Research and Technology*, Vol. 2, No. 5. Available at: http://www.indjsrt.com

Mehrotra, Santosh, Saha, Partha, Gandhi, Ankita, Devi, Kamala and Sinha, Sharmistha (2013). "Low Female Employment in a Period of High Growth: Insights from Primary Survey in Uttar Pradesh and Gujarat." Institute of Applied Manpower Research Planning Commission, Government of India. Available at:

http://www.iamrindia.gov.in/downloads2014/iamrreports/report9_2013.pdf

Mehrotra, Surabhi Tandon (2010). A Report on Domestic Workers: Conditions, Rights and Responsibilities. A study of part-time domestic workers in Delhi. December. Jagori, New Delhi.

Mehta, Aasha Kapur and Arora, Dolly (2015). Base Paper on Availability of Data and Data Gaps for Situation Analysis of Well-being of Children and Women prepared for MOSPI and UNICEF.

Mehta, Aasha Kapur et al. (2004). "The Budget: A Gender and Poverty Sensitive Perspective." National Commission for Women.

Mehta, Aasha Kapur (2000). Background Paper for the South Asian HDR 2000 on Women and the Economy in India.

Mehta, Aasha Kapur (2000). The Invisible Workers: Women's Unrecognised Contribution to the Economy, *Manushi*, November-December.

Mehta, Aasha Kapur (1998). "Administrative Responsiveness and Competitiveness: Gum Karaya Case," *Indian Journal of Public Administration*, Vol. XLIV, No. 4, April-June.

Mehta, Aasha Kapur (1998). "Sustainable Interventions for Poverty Alleviation: A Best Practice Case of Gum Karaya in Andhra Pradesh." India. New Delhi: UNIFEM.

Mehta, Aasha Kapur (1996). "Recasting Indices for Developing Countries: A Gender Empowerment Measure," *Economic and Political Weekly*, Vol. 31, No. 43, October 26.

Mencher, J.P. and Sardamoni, K. (1982). "Muddy Feet, Dirty Hands: Rice Production and Female Agricultural Labour," *Economic and Political Weekly*, Vol. 17, No. 25, Review of Agriculture, December 25. pp. A-149-167.

Mukhopadhyay, Swapna and Tendulkar, Suresh D. (2006). "Gender Differences in Labour Force Participation in India: An Analysis of NSS Data," MIMAP Gender Network Project, Phase III. Sponsored by International Development Research Centre (IDRC), Canada. National Policy for the Empowerment of Women (2001). Available at: <u>http://wcd.nic.in/sites/default/files/National%20Policy%20for%20Empowerment%20of%20Wo</u> <u>men%202001.pdf</u>

National Sample Survey Office (2013). Key Indicators of Employment and Unemployment in India. NSS 68th Round 2011-12, Ministry of Statistics and Programme Implementation, Government of India, New Delhi.

National Sample Survey Organisation (1997). NSS Report No. 409: Employment and Unemployment in India, 1993-94. NSS 50th Round 1993-94, Department of Statistics, Government of India, New Delhi.

National Sample Survey Organisation (1997). NSS Report No. 416: Participation of Indian Women in Household Work and other Specified Activities 1993-94. NSS 50th Round 1993-94, Department of Statistics, Government of India, New Delhi.

National Sample Survey Organisation (2001). NSS Report No. 465: Participation of Indian Women in Household Work and Specified Activities 1999-2000. NSS 55th Round 1999-2000, Ministry of Statistics and Programme Implementation, Government of India, New Delhi.

National Sample Survey Office (2013). NSS Report No. 550: Participation of Women in Specified Activities along with Domestic Duties. NSS 66th Round 2009-10, Ministry of Statistics and Programme Implementation, Government of India, New Delhi.

National Sample Survey Office (2014). NSS Reports No. 559: Participation of Women in Specified Activities along with Domestic Duties. NSS 68th Round 2011-12, Ministry of Statistics and Programme Implementation, Government of India, New Delhi.

Omvedt, Gail (1992). "The Unorganised Sector and Women Workers," *Guru Nanak Journal of Sociology*, Vol. 13, No. 1, April. pp 19-61.

Planning Commission (2007). Report of Sub-group on Gender and Agriculture for the Eleventh Five Year Plan (2007 – 2012). New Delhi.

Raveendaran, G. (2010). Contribution of Women to the National Economy. International Labour Organization. ILO Asia Pacific Working Paper Series. June. Available at: <u>http://www.ilo.org/wcmsp5/groups/public/---asia/---ro-bangkok/---sro-</u>new delhi/documents/publication/wcms 146136.pdf

Sardamoni, K. (1987). "Labour, Land and Rice Production – Women's Involvement in Three States," *Economic and Political Weekly*, Vol. 22, No. 17, April 25. p. WS 3.

Shramshakti (1988). Report of the National Commission on Self Employed Women and Women in the Informal Sector, June, New Delhi, p.28.

Sinha, Shalini (2015). How Women Home-Based Workers are coming together to Demand Better Rights and Protection. Available at: <u>http://www.thebetterindia.com/19504/women-home-based-workers-coming-together-demand-better-rights-protection/</u>

Srivastava, Nisha and Srivastava, Ravi (2009). "Women, work, and employment outcomes in rural India." Available at: <u>http://www.fao-</u>

ilo.org/fileadmin/user_upload/fao_ilo/pdf/Papers/17_March/Srivastava_Final.pdf

Sudarshan, Ratna M. (1998). Employment of Women, Trends and Characteristics, National Seminar on in Search of New Vistas, Women's Vocational Training Programme, Directorate General of Employment and Training, New Delhi, July 30-31.

Sujaya, C. P. (2006). "Climbing a Long Road Women in Agriculture in India Ten Years after Beijing," MSSRF, Chennai as cited in Report of the Subgroup on Gender and Agriculture for the Eleventh Plan.

United Nations (2009). System of National Accounts 2008. New York.

Verma Amit, (2011). "Study of Female Cobblers' Socio-Economic Status." Centre for Civil Society, August 3.

Visaria, Pravin M. (1999). "Level and Pattern of Female Employment, 1911-1994," in T.S. Papola and Alakh N. Sharma (eds.). *Gender and Employment in India*, New Delhi: Vikas Publishing House.