



# RE-SEARCH ON GDP AND UNPAID WORK: A FEMINOCENTRIC VIEW

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## ABSTRACT

In India, as elsewhere, people face a conflict over the time spent on household work and childcare versus time spent on paid work. Ironically, if people are paid market rates for childcare and cooking work, rather high valuations are put on these supposedly “shadow works”. When estimates of the national income have been adjusted for the unpaid, non-monetised and down-marketed domestic work, Gross Domestic Product (GDP) will show large increase. Accounting techniques devalue or incapable to accommodate these works to National Income frame work; as well as many people consider it to be women’s work.

Many women living in poverty carry the dual responsibilities viz. both unpaid care work and subsistence farming. Women’s responsibility for care leads to the violation of their basic human rights to education, political participation, decent work and leisure. It contributes to persistent gender inequalities. Therefore, this study focuses on the rural unpaid care works or shadow works of Kerala. For this study, both primary and secondary data were used. The survey was conducted in Manimala Grama Panchayat of Kottayam District. The study is focused on rural agrarian households. It was difficult to employ a census method in the locality due to the size of the population; therefore random sampling technique was employed and 50 samples were collected from the ward No. 4 - an area which follows the socio-economic cross section of the Panchayat. The study has been conducted in a controlled line of selection of housewives that they should be full time unpaid care worker or home maker.

**Keywords:** Gross Domestic Product, Care Work, Opportunity Cost.

## INTRODUCTION

In India, across a variety of regional and cultural divisions, domestic work and childcare are widely considered to be women’s work. It is often implicitly seen as undignified for a man to actually get involved in the dirty work of child cleaning, the messy work of dishwashing, or the time consuming women’s jobs of cooking curries or sweeping the floors. Since it is the domestic work of women, it has been realised as a part of nation building, the gender related issues can be reduced to a significant level.

Housewives are caring the economy and nurturing the future as well. Care is crucial to human well-being and to pattern economic development. Care services, especially shadow works of housewives have an important public good component because they improve productive human capabilities as well as have significant international dimensions.

## RESEARCH PROBLEM

Women, regardless of class, race, caste and ethnicity are expected to provide care as part of their roles as mothers, wives, and daughters; and women living in poverty or housewives are disproportionately affected by this responsibility.

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## SIGNIFICANCE OF THE STUDY

Women represent 48% of total population in our country. Women do all the work in a house. Her day is always busy. Her daily routine involves cooking, cleaning, shopping, doing the laundry, caring for children, caring for animals etc. All these jobs are doing women. All these jobs require lots of patience, tolerance and sense of responsibility. But she get no compensation- unpaid work or shadow work. In order to truly understand the needs and capacities of communities and the nation, unpaid works of women needs to be recognized and valued. Therefore, the present study tries to make an inquiry in the unpaid care-economy of rural Kerala.

## OBJECTIVES

1. To re-research on the meaning of "Gross Domestic Product".
2. To understand the market value of unpaid 'care work' through time use survey.

## METHODOLOGY

The study is mainly based on primary as well as secondary data. The primary data are collected through questionnaire to analyse the time use value of unpaid care work. The secondary data is collected from books, journals, news-papers and articles.

## SAMPLE SIZE AND SAMPLING TECHNIQUE

The present study is a sample survey. It is difficult to conduct a census study because of the large size of the Universe. Besides, the various elements of the population of the study are homogeneous in one respect or another. Therefore the investigator believes that a sample study would sufficient. All data collected have classified, stored and tabulated for giving more apprehension. Housework is the main input to household production. It refers to the unpaid work household members expend in producing goods and services for own use or volunteering. Time used on housework can be estimated fairly well by time use surveys.

The way the time will be valued has a crucial effect on the value of the whole household production. For valuation of the time, the wage data of the appropriate category of worker may be used.

## GROSS DOMESTIC PRODUCT (GDP)

Gross Domestic Product (GDP) is broadly the market value of final goods and services produced within domestic (economic) territory of a country. It can be measured in two ways: at current market prices and at constant prices. GDP at market prices is the sum of the gross values added of all resident producers at market prices, plus taxes less subsidies on imports.

## GDP Calculations

When final goods and services included in GDP are valued at current market prices, i.e., prices prevailing in the year for which GDP is being measured, it is called GDP at current market prices or Nominal GDP, For example. Nominal GDP of 2018-19 is the value of output produced in 2018-19 at the market prices that prevail in 2018-19.

On the other hand, when goods and services included in GDP are valued at constant<sup>2</sup> [fixed] prices, i.e., prices of the base year, it is called GDP at constant prices or Real GNP. For example real GDP of 2018-19 is the value of output produced in 2018-19 measured at base year's (say 2011-2012) prices.

## Limitations of GDP Estimation

GDP is being used by countries since 1930s to describe the macroeconomic performance of a country. But its efficacy to be a parameter of “development” or “well-being” is coming under attacks by many economists and institutions all over the world. Its limitations as an index of welfare of a country can be summarised as:

- ✓ Witness a growth rate due to price rise.
- ✓ Social indicators like level of education, health, freedom and position of women in society are not part of GDP.
- ✓ Climatic factors are not included in GDP.
- ✓ As much of unorganized sector is beyond the calculation of GDP.
- ✓ Barter & cash transactions that take place outside of recorded marketplaces are not included in GDP statistics.
- ✓ Economic "bads", such as pollution, are not included in GDP statistics.
- ✓ Goods and services produced but not exchanged for money, known as "non market production", are not measured in GDP.
- ✓ GDP measures quantity and not quality.

## UNPAID CARE WORK OR SHADOW WORK

In Judy Brady's iconic essay, “I Want a Wife” the feminist activist enumerates the dozens of practical and emotional tasks wives perform as a matter of duty. At the end, she asks: “My God, who wouldn't want a wife?”

Wives, mothers, sisters, daughters — women do an estimated 75% of the unpaid work in the world, according to McKinsey<sup>3</sup>. Feminist economists have long advocated for the inclusion of this work in national

<sup>2</sup> Constant prices refer to prices prevailing in some carefully chosen year called base year. Mind, a base year is a normal year devoid of price fluctuations. Presently in India, 2011-2012 is taken as the base year for estimating GDP (or any other related aggregate) at constant prices. According to Union Minister Sadananda Gowda (press reports on July 2, 2018) 2019-2020 fiscal year onwards base year will be 2017-2018 for GDP estimation while current fiscal CPI will be estimated on 2018 prices.

<sup>3</sup> McKinsey a global management consulting firm that serves a broad mix of private, public and social sector institutions. It help educationalists, researchers and other stakeholders make significant and lasting improvements to their performance and

accounting statistics. Household labour in general, though, is considered beyond the “production boundary” of goods and services that account for GDP estimates. Yet, McKinsey believes, unpaid care work performed by women accounts for the equivalent of 13% of global GDP.

The ground is starting to shift, as ageing populations, plummeting birth rates, and stalled or declining female labour force participation have forced societies to examine the care burden that falls overwhelmingly on women. Japan, Hawaii and, at the international level, the UN, are all experimenting with ways to better value unpaid work, or alleviate the burden of it.

### **But how should governments approach the problem?**

Diane Elson, former chair of the U.K.’s Women’s Budget Group (WBG), a network of researchers and advocates, has advocated a three-pronged strategy. For Elson, the goals are:

- **Recognise:** Recognise the care by measuring it.
- **Reduce:** Reduce the burden by investing in physical and social infrastructure that eases individual care and domestic work.
- **Redistribute:** Redistribute the work through policies, such as shared parental leave, that encourage men to take on care work at the same rate as women.

### **Estimating Care: Methodologies and Challenges**

We don’t normally think of unpaid work as relevant to the economy. Housework – the cycle of cooking, cleaning, wiping, soothing, ironing that forms the daily life of so many women around the world (and yes, the emergence of the New Man notwithstanding, it is still women who do the vast bulk of unpaid work) – is usually excluded from economic analysis.

But what if one day women all over the world put down their feather dusters? What if we had to start paying for all the free cleaning and childcare? Canada’s national statistical agency has already thought about this: it came to the conclusion that unpaid work contributed between 30.6 and 41.4 per cent of GDP. That is a not insubstantial figure. So, why is such a huge contributor to national wealth being routinely ignored?

Until the second world war, Denmark, Sweden, and Norway included household production when estimating national income, but stopped once UN guidelines for national accounts were standardised. These did not include extensive accounting of household or non-market work.

Since then, feminist economists and others have advocated for deploying “time-use surveys” to give a fuller picture of the economy. These surveys usually ask participants to keep a diary of all of their activities over a period of time. In some cases they consist of a detailed questionnaire. According to Elson, at least 85 countries across all regions of the world have conducted time-use surveys in the past half-century.

“Care might be more important not so much for the amount of time and energy it takes, but for what it prevents you doing”

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realize their most important goals. With nearly a century of experience, McKinsey have built a firm uniquely equipped to enhance research in all disciplines.

The surveys have their shortcomings. Time-use surveys can undercount the amount of time that women, especially, spend on childcare. Women often supervise children while doing other activities, such as cleaning or cooking. But, it can be observed that people will report only one of those simultaneous activities; that is something that's not always captured by the idea of the 'value of care'.

In countries with low literacy rates, government surveyors can conduct face-to-face interviews. It is advisable to carry out detailed time-use surveys used by participatory methodology in low-resource settings such as Kenya, Nepal, Nigeria, and Uganda and other less developing Asian and African countries.

Then there's the question of how to value this unpaid time in monetary terms. Does it make more sense to calculate it as a replacement cost — the price one would pay to outsource a given activity? Or is the true price the opportunity cost — the labour market earnings that the caregiver or cleaner is losing out on by looking after an aged parent, or doing a load of laundry?

For example, if time-use surveys show women in a particular village spend four hours a day gathering water, what is the point of pausing to value those four hours in dollar terms, when it is clear they would benefit from improved water infrastructure regardless of how much their time is worth?

Without estimates, one has little leverage with which to push for certain policy changes when decision-makers are weighing costs and benefits.

“Investing in social infrastructure would create more jobs than an equivalent investment in physical infrastructure”

Valuation efforts, have gradually been gaining ground in national income accounting and are illuminating. Estimates differ among countries that are attempting to measure the value of unpaid care work, from 20 percent to 60 percent of GDP. In India unpaid care is estimated at 39 percent of GDP, in South Africa 15 percent. In 2008, the Organization for Economic Cooperation and Development published estimates of household production in 27 countries and highlighted that the value of household production as a share of GDP varies considerably. It is above 35% in several countries generally considered affluent—Australia, New Zealand and Japan and below 20% in Mexico and Korea.

The problem of GDP is more associated to the way it is calculated and what it adds. It is measured by collecting data of all the economic activity and transactions. By economic activity we mean everything that has been bought or sold must be calculated in GDP. However, everything in an economy is not associated to economic activity. Not does it should what a particular country citizens values.

## **TIME USE SURVEY ANALYSIS**

The survey was conducted in Manimala Grama Panchayat of Kottayam District. It has total 4795 Households with total population of 18653; 48.4% of total population are males and 51.6% are females. This agriculture-based local economy is also supported by NRIs rather than government employees.

The study is focused on rural agrarian households. It was difficult to employ a census method in the locality due to the size of the population; therefore random sampling technique was employed and 50 samples were collected from the ward No. 4 - an area which follows the socio-economic cross section of the Panchayat. The study has been conducted in a controlled line of selection of housewives that they should be full time unpaid care worker or home maker.

SNA93 (System of National Accounting 1993) recognizes that household production is a part of economic activity in a general sense. Households produce goods and services quite similar as produced in market economy. SNA93 includes also goods produced in households, presumed that the production is significant for the whole country.

Survey covered only females, especially housewives, in the locality of Manimala Panchayat. Sampling design adopted was a two stage sampling. The census wards being first stage and households the second stage random sampling unit. From all the 14 wards, ward No. 4 was selected. The survey was conducted during January, 2018 to March, 2018. To facilitate the quantification of unpaid activities of women, wages of workers involved in various activities covered in Time Use Survey were also collected in the survey.

The unpaid works or shadow works of the region were recognised and classified as follows under Five heads

**Production I:** Farming Activities Ploughing, preparing land, cleaning of land; Sewing, planting, transplanting; Application of manure, fertilizer, pesticides and watering; preparing organic manure. Harvesting, threshing, picking, winnowing; Weeding; Supervision of work.

**Production II:** Kitchen Gardening – Backyard cultivation, floriculture, preparing land, cleaning of land; Sewing, planting, transplanting; Application of manure, fertilizer, pesticides and watering; preparing organic manure. Harvesting, threshing, picking, winnowing; Weeding; guarding or protection of crops. Flower gardening – landscaping, maintenance, cutting, collecting, storing

**Production III:** Animal Husbandry - Grazing animals outside, Tending animals – cleaning, washing shed, feeding, watering, preparation of feed, Caring for animals : breeding, shearing, medical treatment, grooming, shoeing, AI etc. Milking and processing of milk Collecting, storing of poultry products. Making dung cakes, Poultry rearing – feeding, cleaning, Other related activities.

**Services I:** Collecting water, fire wood and storing & stocking. Wood cutting, chopping & stocking firewood, Care of house plants, indoor and outdoor garden work. Sale and purchase related activities. Processing & Storage, Milling, husking, pounding, Parboiling, Sorting, Grading Grinding, crushing, Any other related activity

**Services II:** Caring Works: child care, nursing aged people, washing, cleaning, cooking etc. Any other related activity

#### The Fundamental Variables<sup>4</sup>:

Per capita Income	₹111780
Average Household size:	5
No. of Households in Ward No. 4:	345
Total no. of housewives in ward No. 4:	406
Average Labour Charge for female	350 per day
Source: NSSO document and Vikasana Rekha (Development Report) of Local Government	

Source: Primary Data Collection

<sup>4</sup>Collected from Secondary Sources: NSSO document and Vikasana Rekha of Local Government.

## Inferences of the Survey

1	<b>Production I: Farming Activities</b> Average Time use (in minutes) :	95
2	<b>Production II: Kitchen Gardening</b> Average Time use (in minutes) :	118
3	Production III: Animal Husbandry Average Time use (in minutes) :	180
4	Services I: Supporting Services Average Time use (in minutes) :	135
5	Services II: Caring Works Average Time use (in minutes) :	125
6	<b>Total 1+2+3+4+5</b> :	<b>653</b>

Source: Primary Data Collection

When Time use for various activities convert to money value:

$$6^{\text{th}} \text{ item} / 60 \times 8 = 1.36 \text{ hrs.}$$

Total Money value of average unpaid household work =  $1.36 \times 350$

$$= 476.00 \text{ per day per person}$$

Annual Gross Domestic Money value of unpaid household work

$$= 469.00 \times 365 = 173740$$

### GDP of Ward No. 4 of Manimala Grama Panchayat

Total Market value of unpaid work + Total Market Value of Paid Work

$$= (173740 \times 406) + (1725 \times ₹111780)$$

$$= ₹ 70538440 + 192820500 = 263358940$$

Result: There is a 36.58% increase in the total Income of Ward No. 4, when the unpaid work of housewives incorporated to the GDP. The analysis attempted in this paper reveal that GDP will increase by about 36.58% if we take in to account the unpaid work of the women in SNA activities. If we include activities in the extended SNA, the women's contribution will be much more.

### Remarks:

However, the methodology used here would require further refinement as only one factor of household production namely value of time spent on housework has been taken into consideration. Some approximation has to be attempted for other factors also mention in section 4 of this paper.

The study envisages following limitations also in relation to the data collection:

- Women consider the care work is a part of their responsibility towards the society
- Women are not ready to monetise their care work (the ethical question)
- Women have no time use data on their household affairs.

- Most of their work are overlapping each other e.g. cooking and cleaning.

## CONCLUSION

Women today had come to play and occupy top posts in organisations and had made their presence felt in the business fraternity. Besides, they played a great role as chiefs of local bodies. This shows their contribution to society is invaluable. They do self-employment activities like weaving, tailoring, maintenance of kitchen gardens, poultry, dairy farming, agriculture etc. But, still the silent contributions made by housewives to the economy of a nation state remains to be calculated. The home maker has ultimate career. All other careers exist for on purpose only.

## BIBLIOGRAPHY

- Alesina, A. and A. Ichino (2009), *L'Italiafatta in casa. Indagine sulla vera ricchezza degli italiani* (Homemade Italy. Investigation on the true wealth of the Italian), Mondadori, p. 154.
- Antonopoulos, Ranina (May 2009) : *The unpaid care work - paid work connection-* Policy Integration and Statistics Department (Geneva ILO).
- Budlender, D. (2008), "The Statistical Evidence on Care and Non-Care Work across Six Countries." UNRISD: Gender Programme Paper No. 4, UNRISD, Geneva.
- Budlender, Debbie (2008): *The statistical evidence on care and non-care work across six countries*, Gender and Development Programme Paper No:4 - United Nations Research Institute For Social Development.
- Cassirer, N. and L. Addati (2007), *Expanding Women's Employment Opportunities: Informal Economy Workers and the Need for Childcare*, International Labour Organization, Geneva.
- Eisler Riane (2013) *Building a caring economy and society beyond capitalism socialism and other old isms*. Vol.1 Issue 6 – May 2013 (online article).
- Elson, D. (2000), "Progress of the World's Women 2000", UNIFEM Biennial Report, United Nations Development Fund for Women, New York.
- Esquivel Valeria(2013): *Measuring unpaid care work with public policies in mind*.
- Falth Anna and Mark Blackden (2009) *Policy Brief- Gender equality and poverty reduction – Unpaid care work* Issue 1 October 2009.
- Ferrant Gaele, Luca Maria Pesando and Keiko Nowacka (2014): *Unpaid Care Work: The missing link in the analysis of gender gaps in labour outcomes - OECD Development Centre*.
- Folbre, Nancy (2016) *Measuring Care: Gender, Empowerment and the Care economy-* Journal of Human Development Vol.7, NO.2, July 2006.
- Guruprasad, M (prof)(2016): *Economics for Everyone :Evaluating economic activity Home Economics – Housewives Contribution to the Economy*. Online Published Article –AICR Business School Mumbai.
- Henan, De Jerome, Susan Himmelweit (March 2016) *Care Economy: A gender analysis of employment stimulus in seven OECD countries* International Trade Union Confederation.
- ILO: *Measuring the economic and social value of domestic work*. Domestic Work Policy Brief No.3. Institute of development studies – Online Discussion "Addressing Unpaid Care in the Post 2015 Agenda" 20-24 October 2014 (Wiki Gender).
- Jamb Bhumika ,Yamini Mishra, Navanita Sinha (2013) *The Paradox of Gender Responsive Budgeting* Vol.XLV111 NO.20 EPW.
- Jayita P. and Murali P. (2009) *Working Mothers: How much mothers and Where is the womanhood?* In: *Some Issues in Women's Studies, and other essays* (A.R Singh and S.A Singheds), MSM, 7, Jan-Dec 2009,P 63-79.
- Khambatta, Persis (2012): *India's Economy :The other haif- centre for strategic and International Studies* Vol.2, Issue 2.
- Kulshreshtha, A.C and Gulab Singh: *Valuation of non- market household production-* Central Statistical Organisation, NewDelhi. *Making care visible Women's unpaid care work in Nepal Nigeria Uganda and Kenya* (online article).

- Muzamdar, Sumit, Guruswamy M (2006) : Female labour force participation in Kerala: Problems and Prospects (California) March 30- April 1, 2006 (online article).
- National Academy for Training and Research in Social Security Reading Material – Women and Men in Development (online article).
- OECD (2014), Gender, Institutions and Development Database.
- Olsen Wendy and Smita Mehta Female Labour Participation in Rural and Urban India : Does Housewives work count?
- Razavi, S. (2007), “The Political and Social Economy of Care in a Development Context”, Conceptual Issues, Research Questions and Policy Options, Gender and Development Programme Paper N. 3, UNSRID, Geneva.
- Razavi, Shakra (2007) The political and social economy of care in a development context: Conceptual Issues ,Research questions and Policy Options, Gender and Development Programme Paper No:3 (Geneva, United Nations Research Institute for Social Development).
- Rizavi, S. S. and C. Sofer (2010), “Household Division of Labour: Is There Any Escape From Traditional Gender Roles?”, Cahiers de la Maison des Sciences Economiques, L’Atelier Paris1-Le Caire, Cairo.
- Satua Bose , Meenakshi (2015): Economic perspective of the rights of a housewife in India- Critical Analysis Vol.1:Issue- 11,10,(online article).
- Schiess, U. and J. Schön-Bühlmann (2004), Satellitenkonto Hausaltproduktion. Pilotversuch für die Schweiz (Satellite Account- old production house. Pilot project for Switzerland), FSO Federal Statistical Office, Neuchâtel.
- Stiglitz, J., A. Sen and J.P. Fitoussi (2007), Report on the Commission on the Measurement of Economic Performance and Social Progress, Paris: Commission on the Measurement of Economic Performance and Social Progress, Paris. <http://www.stiglitzsen-fitoussi.fr/>.
- The Invisible Economy and Gender Inequalities: The importance of measuring and valuing unpaid work (2010) Pan American Health Organisation.
- Thorpe Jodie, Mar Maestre and Thalia Kidder (March 2016):Market systems approaches to enabling women's economic empowerment through addressing unpaid care work.
- UN (2013), Report of Sepulveda Carmona, M., the Special Rapporteur on Extreme Poverty and Human Rights: Unpaid Care Work and Women's Human Rights. Available at SSRN 2437791.
- UN Women Headquarters Facts and Figures Economic Empowerment 2014.
- Unpaid care and Post 2015 pdf Post-2015 Women’s Coalition.
- Waris, Amtul , B. Nirmala and S. Arun Kumar (2016): Gender gap and female workforce participation in agriculture in Andhra Pradesh, India , African Journal of Agricultural Research Vol.11(9),PP.769-778, 3 March 2016.
- World Bank (2014), World Development Indicators.

APPENDIX - I  
QUESTIONNAIRE CUM INTERVIEW SCHEDULE

PERSONNEL INFORMATION

1. Name :
2. Age :
3. Education :
4. Religion : Christian / Muslim / Hindu / SC/ST
5. Income strata : APL / BPL
6. Nature of family : Nuclear / Joint
7. Occupation : Govt. / Private / Manual labour / House wife
8. Monthly income:  
Below 10000 / 10000-25000 / 25000-50000 / Above 50000
9. No. of Children
10. Age of Children :0-3 / 3-6 / 6-12 / 12- 17
11. Age of parents (if they residing with you)
12. If she widowed take a detailed interview:-----

OCCUPATION AS A HOME MAKER

13. Land size
14. Agricultural Activities if any
15. Time spending for Children
16. Time spending for household activities
17. Leisure Time
18. How you are spending your leisure time
19. Do you engaged in any self-employment activities like bakery,tailoring...etc. Conduct detailed survey on that (Time/income etc.)
20. Any income earning activities

(poultry farming, Goat, cow and other...)

Yes / no

(if yes details)

Time spending income per week.

Is it indeed to support family: Yes / No

21. Who is purchasing grocery and other day to day items for home.

## FINANCIAL FREEDOM

22. Is your income a separate fund for your own consumption Yes/ No

23. Do you have a separate bank account Yes / No 24. Do you have saving habits Yes / No

25. Purpose of saving:

26. Do you have purchased anything worth more than Rs. 1000 for your house without the consent of your husband

Yes / No

If yes describe

27. Who is taking decisions on financial matters in your family

28. What was your financial contribution to the major project full filled recently in your family. Describe AS AN EMPLOYEE

29. Your office time

30. When you leave the home (time)

31. When you reached back (time)

32. Who will manage the schooling of children

33. Who will take care your cooking, washing etc.

34. Do you have a helper in home

35. Who will take care the studies of children at home

36. Who is making shopping for your family

37. Do you have owned vehicle

38. Your monthly income

### AS A SOCIAL BEING

39. Do you have separate mobile phone

40. Are you getting time for newspaper reading

41. Are you getting time for watching T. V

42. How much time you spend for TV watching

(time from-----to -----)

43. Do you have membership in any organisation (Kudumbasreeetc.)

Yes/ No

If Yes describe time and positions (secretary/President....) if held

44. Are you an active member in religious activities

Yes/No

If yes time and positions if held

45. Are you inclined to any political party

46. How many times you travelled more than 50 km for tour.

47. What was your longest travel (From----- to-----)

48. Describe your one day regular activities

49. 'Along with your domestic duties did you more or less regularly carry out during the last 365 days:

1. maintenance of kitchen gardens, orchards, etc? (yes/no)
2. work in household poultry, dairy, etc? "
3. free collection of fish, small game, wild fruits, vegetables, etc. for household consumption?
4. Free collection of firewood, cow-dung, cattle feed, etc, for household consumption?
5. grinding of foodgrains for household consumption?
6. sewing, tailoring, weaving, etc., for household use?
7. tutoring of own children or others' children free of charge?
8. Any other-----

50. Write down your observations (if anything valuable)

