

# Value-Added Tax: Measuring its Impact



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## INTRODUCTION

In this project, I attempt to compute the value-added tax paid by a household in a month, using a consumption survey based on a daily interview. In the process, I examine the suitability of various survey methods and discuss a possible role for the survey method we have chosen. The first section describes the motivation for this project, the second reviews problems related to consumption surveys and the third is an analysis of the methodology used by the NSSO, the fourth presents the methodology of my survey. In the fifth and sixth sections, I provide an overview of my results and describe the problems faced in the project.

## MOTIVATION

The nature of indirect taxes and the methodology of surveys that may be used to measure indirect taxes paid are vital issues in the Indian context. The percentage of the Indian population paying income tax is less than 10%. As a result, for most households, the taxes with the greatest direct impact on their ability to consume are indirect taxes, especially the value-added tax, which is levied on many commonly consumed goods such as rice and wheat flour. While the income tax regime is highly progressive, functioning as a redistributive mechanism that uses taxes paid by the rich to fund programs that may help alleviate poverty, it is possible that indirect taxes, which on the surface are a valuable source of revenue for the government, actually serve to create inefficient circles that take money from and deliver benefits to the same people. In this study, I investigate the value-added tax paid by a sample of eight people. None of the sample members is required to pay income tax, but all are well above the poverty line.

This issue leads to the additional question of the value of household consumption surveys in measuring tax paid. I review several issues with consumption surveys and their comparison and the methodology followed by the National Sample Survey Organization (NSSO) since the 50<sup>th</sup> round of its consumption survey, the NSS, discussing its suitability as the basis of studies related to consumption taxes. I then formulate a survey methodology that may provide a potential "gold standard" for comparative studies of survey methodology in India.

## HOUSEHOLD CONSUMPTION SURVEYS

Information on household expenditure is of much economic research, including on consumption and savings patterns, poverty and inequality and living standards.<sup>1</sup> Household consumption surveys use recall or diary methods, the level of the respondent, the period of survey, and the degree of commodity detail (from less than 20 items to over 400).

### **Recall and Telescoping Error**

There are many potential sources of error in a recall consumption survey. The most important is error due to recall, which presumably increases with time. Research has shown that, all else remaining constant, the longer the period of recall, the lower the reported consumption per standardized unit of time. A related error results from telescoping, in which the household compresses consumption that occurred over a longer period of time into the reference period, leading to the reported consumption being greater than actual consumption.<sup>3</sup> The direction of the error caused by the reference period is difficult to deduce, as longer reference periods may result in both memory loss errors and telescoping errors.

### **Errors in Monitoring Consumption**

A third error is related to the inability of the subject to monitor consumption of all the members of the household. This error is unevenly distributed across goods—since some goods are more likely to be consumed outside the house—and also increases with an increase in the number of adults in the household. Other sources of error with no obvious bias include rounding error and cognitive errors that result from the construction of a period of consumption that is not natural, although this is probably minimized in a daily recall survey.

### **Error due to a Lack of Detail**

One of the central issues in survey design is the number of items whose consumption is measured. Greater detail results in a more accurate survey and, in general, higher reporting, but may also result in greater fatigue and hence higher non-response. However, the savings in survey time from a reduced number of items has been found to be minimal. The direction of the error caused by the reference period is difficult to deduce, as longer reference periods may result in both memory loss errors and telescoping errors.

### **Comparing Methodology**

The main difficulty in comparing methodology of household consumption surveys is the lack of a "gold standard." In developed countries, comparative studies usually take scanner data or diary reporting as the best approximation, but this is impossible in developing countries due to a lack of infrastructure and

lower literacy levels. A comparison between diary reporting and recall surveys may be inaccurate because, in practice, subjects are often assisted with completing the diary entries, as survey staff return every few days to supervise completion. It has been found that the involvement of the survey staff does not significantly affect reporting quality.

Personal diaries are considered better sources of information, because, in many societies, household members are unaware of each other's consumption, but are unfeasible due to additional cost. However, since, in developing countries, food grains, pulses and vegetables form a large proportion of total expenditure and these items are generally purchased and consumed collectively, I suggest that personal surveys would result in massive over-reporting.

#### *The Possible Impact of Recall Error in Empirical Studies—An Example*

Deaton and Paxson found an important, puzzling empirical result: at constant per capita expenditure (PCE), the budget share of food falls as household size increases. This finding, which appears to contradict theoretical work, has been confirmed several times. Gibson, providing an example of the importance of survey methodology, found that food expenditure estimates from shorter, less detailed recall surveys have measurement errors that are correlated with household size, which may cause the reported fall in the budget share.<sup>1</sup>

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<sup>1111</sup> Kathleen Beegle et al., *Methods of Household Consumption Measurement through Survey: Experimental Results from Tanzania* (Washington DC: World Bank, 2010), 1-10

## A REVIEW OF NSSO METHODOLOGY

The 50<sup>th</sup> round of the NSS was the organization's fifth quinquennial survey on consumer expenditure. According to a decision of the Governing Council, consumer expenditure and employment surveys were to be carried out simultaneously every five years, starting from the 27<sup>th</sup> round in October 1972 to September. From the 42<sup>nd</sup> round, a smaller annual consumer expenditure inquiry was also conducted.

The survey period of the 50<sup>th</sup> round was from July 1993 to June 1994. The geographical coverage was to be the whole of the Indian Union except Ladakh and Kargil districts of Jammu and Kashmir, 768 interior villages of Nagaland and 172 villages in the Andaman and Nicobar Islands that remain inaccessible throughout the year. Some other districts of Jammu and Kashmir and Amritsar district in Punjab had to be excluded due to unfavorable field conditions. In all, 1,15,354 households spread over 11,601 sample villages/blocks were selected.

The survey period was divided into four sub-rounds of three months each and equal number of sample villages and blocks were allotted to each sub-round:

1. Sub-round 1: July-September 1993
2. Sub-round 2: October-December 1993
3. Sub-round 3: January-March 1994
4. Sub-round 4: April-June 1994

The sample of villages and blocks were drawn in the form of two independent sub-samples. Each sub-sample could be used to produce valid but provisional results unless the final results, based on the entire sample, became available.

### **Sampling**

A stratified two-stage sample design was adopted, with census villages as the first stage units (FSUs) in the rural sector and Urban Frame Survey (UFS) blocks in the urban sector, except in some newly-declared towns, for which UFS frames were not available and census enumeration blocks (EBs) were used as FSUs. Households formed the second-stage of sampling in both rural and urban sectors. In the rural sector, the 1981 or 1991 census list of villages served as the sampling frame. In the urban sector, the lists of UFS blocks formed the sampling frame, except for newly declared towns. In Nagaland, the villages situated within 5 km of a bus route constituted the sampling frame and in the Andaman and Nicobar Islands, the set of accessible villages was taken as the sample frame.

Each state and union territory (UT) was divided into one or more agro-economic regions by grouping contiguous districts that had similar population density and crop patterns. In Gujarat, some districts were sub-divided for region formation. The total number of regions was 78. In the rural sector, each district in a region normally formed a separate stratum, but if the population of the district exceeded 1.8-2 million, the district was split into two or more strata by grouping contiguous tehsils. In Gujarat, the portions of a district falling in different regions were taken as different strata. In the urban sector, in order to allocate a larger proportion of the sample to the affluent section of society and thus improve the precision of the overall estimate, urban blocks in towns with population greater than 400, 000 were

placed in different strata depending on whether they belonged to an affluent area. Towns with population less than 400, 000 were taken as strata individually.

The FSU sample size for any state was determined on the basis of investigator strength and the expected workload per investigator. This sample was first allotted to the rural and urban sectors base on their relative sizes, giving double weightage to the urban sector. Within the urban sector, sample allocation was done in proportion to stratum population, giving double weightage to affluent strata. Within the rural sector, if the 1991 census list was used, the state/UT sample was allocated to strata depending on population. If the 1981 census list was used, allocations were sub-rounds 2, 3 and 4 were revised, the state/UT sample for sub-rounds 2-4 (75% of the total) was reallocated to the rural strata in proportion to population as per the 1991 census. In this case, stratum level allocations were adjusted to multiples of 6. In all other cases, allocations were adjusted to multiples of 8.

Sample villages or blocks, except in Arunachal Pradesh, were selected by PPS circular systematic sampling, with population as the size variable, from the appropriate sampling frame, as two independent sub-samples. In Arunachal Pradesh, a cluster sampling procedure was used to draw the sample. The field staff was supplied with a list of sample "nucleus" villages and was advised to select clusters of villages—building a cluster around a nucleus village—according to prescribed guidelines. The nucleus villages were selected circular systematically with equal probability as two sub-samples.

Larger villages and blocks were divided into hamlet-groups/sub-blocks (HG/SBs) of roughly equal population. And the second-stage sampling frame was constituted of households in only two HGs, selected circular systematically, or a randomly selected SB. No HB formation was done in Arunachal Pradesh, while in Kerala, instead of selecting two HGs, two EBs, from the constituent EBs of large villages were selected.

In rural villages, households in the second-stage sampling frame were divided into households exhibiting signs of affluence, such as the possession of any of a specified list of assets, including land in excess of a certain area, or a member holding a salaried job or a profession such as that of a doctor or advocate, were designated "affluent" and the top 10 such households were placed in second-stage stratum 1. The remaining households were placed in second-stage stratum 2. Two households from second-stage stratum 1 and, after arranging the households by means of livelihood, eight households from second-stage stratum 2 were selected circular systematically.

In sample blocks, households with monthly per capita consumer expenditure (MPCE) in excess of Rs 1200 (Rs 1500 in towns with population greater than 1 million) were placed in second-stage stratum 1 and the rest in second-stage stratum 2. In sample blocks belonging to first-stage strata 4, 6 and 8 (affluent areas of towns with population greater than 4 lakh), as many as four households were selected from second-stage stratum 1 and six from second-stage stratum 2. In all other strata, two households from second-stage stratum 1 and eight from second-stage stratum 2. In both cases, circular systematic selection was used. Prior to selection, the households in second-stage stratum 2 were placed according to means of livelihood and MPCE.

## MEASURING EXPENDITURE

The expenditure for food, pan (betel leaves), tobacco, intoxicants, fuel, clothing and footwear was derived by measuring the monetary value of the goods actually consumed during the reference period. An item of clothing and footwear was considered to have been consumed if it was brought into first use during the reference period. For durable goods, the expenditure made during the reference period is taken as consumption. Cooked meals given by employers to employees are considered part of the employer's consumption, and not the employee's, to avoid double counting.<sup>2</sup>

### **Changes in NSS 55<sup>th</sup> Round**

This round of the survey was conducted between July and December 1999.

### **Coverage of Items**

Consumption expenditure on second-hand clothing and durable goods was included. Wages paid to domestic workers who were classified as members of the household were also included.

### **Reference Period**

The major change in the survey was in the choice of reference period. In the 51<sup>st</sup> to 54<sup>th</sup> rounds, one-half of the samples of households were surveyed with a reference period of 30 days for all items. In the other half of the sample, a reference period of 7 days was used for food, pan tobacco and intoxicants, unlike in the 50<sup>th</sup> round, and a reference period of 365 days was used for educational, medical, clothing, footwear and durable goods purchases. During the 55<sup>th</sup> round, information of the consumption of food, pan, etc. was collected independently for 7 and 30-day reference periods from the same households. Staffs were instructed to collect the data for the previous 30 days first. Consumption of clothing, footwear, etc. was collected for reference periods of both 30 days and 365 days. In the rural areas of 15 major states, the average MPCE ranged between Rs 370 and Rs 800 for the 7-day reference period and between Rs 360 and Rs 775 for the 30-day reference period; in the urban areas, the average MPCE ranged between Rs 600 and Rs 975 for the 7-day reference period and between Rs 580 and Rs 950 for the 30-day reference period. Data suggested that in both rural and urban areas, the average MPCE based on a 7-day reference period was consistently higher than the average for a 30-day reference period. The difference was 3.6% in rural regions and 2.5% in urban regions.<sup>3</sup>

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<sup>2</sup> NSSO, *Key Results on Household Consumer Expenditure 1993-94* (New Delhi: 1995), 2-15

<sup>3</sup> NSSO, *Key Results on Household Consumer Expenditure 1999* (New Delhi: 1999)

## SUITABILITY OF RECALL PERIOD

### Method

In January-June 2000, the NSSO conducted a pilot survey to determine the recall period best suited to the measurement of some groups of items. The pilot survey collected data on household consumption with three different reference periods— 30 day, 7 day and 3 day, for items of food, pan, tobacco and intoxicants. The 3-day data was measured by visiting the household on three consecutive days. The interview method was followed but efforts were made to collect accurate data through the measurement of key items. Each household was supplied with a notebook and pen and was requested to keep a record of consumption of each member. Each household was also supplied with two transparent graduated cylinders. For salt, each household was requested to consume from one or more 0.5 kg packets of salt supplied to them. For some items, such as spices, as the daily consumption tended to be small, staff was asked to enter consumption for the 3-day period.

### Findings

From the fieldwork, it was found that relatively affluent households were less cooperative than poorer households and found the use of the containers too time consuming. The less educated households could not record data in the diary very well. Some households did not use the packets of salt.

The study concluded that, for food and most other items, 7-day estimate were higher than 30-day estimates, and that the 3-day estimates were even higher. The 3-day estimates based on data collected daily was taken as standard, and, therefore, the 7-day data was considered better than the 30-day data. Exceptions included milk products, pulses, edible oil, meat, sugar, salt and dry fruits. The differentials tended to be higher for value of consumption than for quantity of consumption. The problem of recall was more serious for items such as vegetables, fruits, spices and beverages.

### Implementation Problems

The main implementation problem with the longer reference period was respondent burden, caused due to a decrease in the importance of many consumption events. The main problem with the shorter reference periods was the need to stagger interviews evenly over 52 weeks of the survey year.

### Criticism

The survey was criticized because of its lack of comparability. The data sets collected with different recall periods, which were meant to be collected independently, actually influenced each other. This produced an estimate of the percentage of the population under poverty that was 3% too low. As a result, the 7-day recall period was dropped in the 55<sup>th</sup> round.

## CONSUMPTION VERSUS ACTUAL USE

Unlike many other consumption surveys, the NSS takes the actual use of a commodity as a measure of its consumption. For example, if 20 liters of milk are purchased on day 1 and used at the rate of 1 liter/day, instead of reporting the consumption as 20 liters on day 1 and 0 l on each subsequent day, the NSSO reports a consumption of 1 l on each day. This can have a large impact on the tax estimates produced, since it becomes impossible to differentiate between purchased goods, on which tax has been paid, and goods produced by the household, on which no tax has been paid. Further, this error may be distributed unevenly with income, since it is probable that the poor manufacture more goods at home than the rich.<sup>44</sup>

If a survey to test shorter recall periods must be implemented on a broader scale, the limitations of the pilot must be overcome. I claim that a better "gold-standard" for the comparison of reference periods would be a daily interview conducted for a period of 30 days. This would resemble a consumption diary, but would be implementable even for uneducated households. Additionally, unlike the 3-day data, my survey would be directly comparable with 7-day and 30-day results, and would not suffer from the issue of variation in consumption across the month.

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<sup>44</sup> NSSO, *Results of a Pilot Survey on suitability of Different Reference Periods for Measuring Household Consumption* (New Delhi: 2000)

## METHODOLOGY OF THE SURVEY

For my study, I use a daily recall survey conducted for a period of one month in order to measure household consumption. The following guidelines were used in the selection of households:

1. Possible survey subjects are selected first, before I check whether the household is suitable.
  - a. Survey subjects are chosen from the people working in a geographically limited defined space.
  - b. The subject should be residing in Gurgaon or in areas within Haryana outside Gurgaon.
  - c. The subject should be in Gurgaon at least 6 days in a week and should be working in the selected space on at least 5 days.
  - d. The subject should be one of the highest earners, preferably the highest earner, in the household.
  - e. The subject should be responsible or should have knowledge of almost all, preferably all, large purchases (purchases of over Rs 100) made in the household.
  - f. It should be feasible to meet the subject each day, preferably in the morning. For this reason, subjects who have been working in the selected place for a longer time and subjects who have reasonably secure employment are preferred. Subjects who possess a mobile phone that is operational even if they temporarily leave the city or state are preferred.
  - g. No other criteria (occupation, education, etc.) are used, but a qualitative assessment is made of the willingness of the potential subject in order to avoid dropouts, as the number of subjects that may be surveyed is limited.
  - h. Once a subject is chosen, an effort is made to choose other similar subjects (based on occupation, income or characteristics of household).
2. Each earning member of the household should have an income of less than Rs 1, 60, 000 per annum for men or Rs 1, 90, 000 per annum for women. The total income of the household should be no less than Rs 70, 000 per annum.
3. The household should reside within the state of Haryana. In some cases, the survey subject may have some relations staying in Haryana and some staying in another state. In this case, the household is taken as the group of relations, along with the subject, residing in Haryana. However, this household is not selected if the survey subject makes frequent visits outside

Haryana. Nevertheless, assets of immediate relations residing outside Haryana are still considered while describing the profile of the subject.

4. The household should not contain any out-migrants who have sent remittances during the past year.

An initial questionnaire is developed for use during the selection of subjects and also to describe the profile of the household for later analysis. Appendix 1 contains the questionnaire used.

1. The following details of the subject are noted:
  - a. Name
  - b. Date of birth
  - c. Occupation, duration for which the subject has been employed under the same person or firm
2. Income and relation to the subject of each other member in the household.
3. Residence of household (in and around Gurgaon) and residence of relations in any other location the subject may visit:
  - a. Address
  - b. Type of house (*kaccha* or *pucca*), number of rooms in the house, type and number of bathrooms, number of fans
  - c. Number of years of residing in the house
  - d. Ownership status or rent paid on the house
4. Assets apart from the house. The exact value of the assets is unimportant, but certain characteristics are noted, e.g. whether the household has a television set, owns a motorcycle, scooter, car or tractor, or owns land.

Each day, the subject is interviewed to find out what the household has purchased the previous day. The survey is conducted for a period for thirty days (from 1<sup>st</sup> June to 30<sup>th</sup> June). The daily survey is conducted according to the following guidelines:

1. The subject is interviewed at the selected space.
2. The subject is interviewed preferably in the morning (between 6:00 AM and 12:00 AM).
3. The subject is not asked whether he/she has bought a particular item; instead, the subject is simply asked to report the purchases made in the household on the previous day.

If it is not possible to contact the subject, a telephonic interview is conducted.

## RESULTS OF THE SURVEY

The following is a summary of the results of the survey. The data is given in Appendix 2 (the profile data—this is not given completely to maintain privacy) and Appendix 3 (consumption data).

Survey Subject	Expenditure	Tax Paid	% Expenditure Paid as Tax
1	5529	192	3
2	7110	529	7
3	3410	132	4
4	5219	170	3
5	7270	427	6
6	4427	140	3
7	5021	89	2
8	15305	288	2

Table 1: Results

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## PROBLEMS ENCOUNTERED

### **Time**

I initially expected to maintain a daily interview time of less than five minutes per subject per day and hoped to spend little or no extra time locating the subjects, since I had agreed a meeting time and place in advance. In practice, however, although the daily interview time was approximately five minutes, the time spent finding the subjects was also five-ten minutes. Since this was despite our participants' having daily employment at a definite, accessible location, a survey of more dispersed subjects could have implementation problems that were perhaps underestimated.

### **Missing Data Entries**

Although time had to be spent in locating the subjects, I was nevertheless able, unexpectedly, to contact them on each day of the survey, either in person or telephonically. A telephonic interview lasted approximately the same time as an in-person interview, and the consumption reported in both forms was similar.

### **Potential Errors**

We assumed that the subjects' reporting was honest and made no effort to verify consumption, as this would have required a structural alteration of our survey. This assumption seems to have been largely justified, as the expenditure reported seems to fall in a reasonable range, but the reported expenditure of the last participant is far greater than the income of his household. Consumption of either liquor or tobacco was reported by most participants, suggesting that the underreporting of stigmatised commodities is unlikely to be a problem, although this may be just a characteristic of the particular sample.

The second, potentially more serious, source of error I noticed was the underreporting of consumption due to an inability to monitor each member of the household. As expected, the reported consumption of larger households suffered from this error: the reported consumption of subject 7, whose household had more members and higher household earnings than most others, had an unexpectedly low consumption. This error may be even more pronounced in our survey, as a shorter recall period means greater burden associated with tracking spending. Also, it is likely that an earning member makes a tally, at least a mental tally, of purchases once a month, or at least once a week, adjusting partially for this error, but may remain unaware of purchases made on the previous day. The error could be rectified by allowing subjects to re-report data of previous days' expenditure, but this would result in greater interview time, greater respondent burden, and potential over-reporting.

Recall and telescoping errors are unlikely to have affected the data, but the effect of possible lack of detail in the survey is harder to estimate. There was a noticeable lack of small purchases; larger purchases, however, are unlikely to have been affected.

## CONCLUSION

To summarise, our study indicates that a 30-day daily household consumption survey, conducted by interviewing a single subject, an earning member of the household, is a potential alternative to other standards used in comparative studies of methodology. The survey proved to be far less time-consuming (in terms of time taken per interview) and intrusive than a similar standard used by the NSSO. The major limitations of the survey were time, respondent burden and difficulties in locating the subjects, which could become serious if the survey was to be scaled up.

The tax paid as a percentage of expenditure ranged from 1.8% to 7.4%. Although this has not been analysed further, indications suggest that the VAT paid by this income group is reasonable. The sample considered were ineligible for most benefit schemes, but, to provide an example of more significant benefits received, the monthly government expenditure on the education of a child is at least Rs 390<sup>1</sup>, which is greater than the tax paid by any of the households. The three commodities on which tax could be a burden for the poor are rice, wheat and fuel (petrol and kerosene). More research is required on this issue, focusing on the expenditure on the poor and the best way to measure it.

**APPENDIX 1**

Name:

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Date of Birth:

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Address:

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*Employment*

Occupation:

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Annual Income:

Rs. \_\_\_\_\_

Has been employed for: \_\_\_\_\_

*Family Details*

No.	Name	Age	Sex	Annual income
1.				
2.				
3.				
4.				
5.				
6.				

*Assets*

No.	Asset	Value
1.		
2.		
3.		
4.		
5.		
6.		
7.		

*Residence*

Ownership/rent status: \_\_\_\_\_

Annual rent (if applicable): \_\_\_\_\_

Has been staying in the present residence for: \_\_\_\_\_

Details of any other residence: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

## Appendix 2

### *Subject 1*

Sex: Male

Age: 21

Occupation: security guard

Income: Rs 74, 000 p.a.

Family: father (earns Rs 70, 000 p.a.), mother, three brothers (two of whom earn Rs 70, 000 p.a.).

Residence: the subject resides in Sector 53, Gurgaon, along with the father and the two earning brothers, while the mother and the third brother reside in Baruaa, District Hamirpur, UP.

Both houses have lights and fans.

Assets: the household owns a cycle, a motorcycle and 2 hectares of land.

Education: the subject dropped out of college after completing the first year of a BA course.

### *Subject 2*

Sex: Male

Age: 26

Occupation: driver

Income: Rs 1 lakh p.a.

Family: father, mother, two brothers (one of whom earns Rs 70, 000 p.a.), two married sisters (not part of the household), one unmarried sister

Residence: the household owns and resides in four rooms in the outskirts of Gurgaon. There are fans and lights in all rooms.

Assets: motorcycle, bicycle, two cows and a calf

*Subject 3*

Sex: Male

Age: 36

Occupation: security guard

Income: Rs 75, 000 p.a.

Family: wife and a son

Residence: the household rents two rooms, equipped with fans and lights, in Gurgaon.

Assets: a bicycle

Education: completed intermediate

*Subject 4*

Sex: Male

Age: 24

Occupation: security guard

Income: Rs 75, 000 p.a.

Family: father, mother, three brothers, wife, none of whom have paid employment

Residence: the father, mother and three brothers reside in District Gumla, Jharkhand. The subject lives in Gurgaon with his wife. Both houses have lights and fans.

Assets: a car, bus and tractor, 20 acres of land (generates an income of Rs 36, 000 p.a.), 5 houses in the village (generates an income of Rs 12, 000 p.a.)

Education: the subject passed the 10<sup>th</sup> standard.

#### *Subject 5*

Sex: Male

Age: 19

Occupation: security guard

Income: Rs 74, 000 p.a.

Family: father, mother, brother, and two married sisters (who do not count as part of the household)

Residence: the subject rents a room in Gugaon, while the other members stay in their house in District Bhratpur, Haryana. The house in Guragon has fans and lights, but the house in the village is kaccha.

Assets: a tractor, three cows

Education: the subject studied till the final year of BA program.

#### *Subject 6*

Sex: Female

Age: 35

Occupation: domestic worker

Income: Rs 60, 000 p.a.

Family: husband (currently unemployed), wife, two daughters (each earns Rs 40, 000 p.a.), one of whom is married and hence is not considered part of the household.

Residence: household rents two rooms in Gurgaon. There are fans and lights in the house.

Assets: bicycle

Education: did not completed primary school

### *Subject 7*

Sex: Male

Age: 24

Occupation: driver

Income: Rs 1.02 lakh p.a.

Family: Father, mother, younger brother, wife and sister-in-law stay in the village, elder brother (earning Rs 1.4 lakh p.a.) stays with the subject in Gurgaon.

Residence: rents room in Gurgaon, owns 5 rooms in Zilla Jhajjar, Haryana. There are fans and lights in all rooms

Assets: TV, motorcycle, radio set, bicycle

Education: 12<sup>th</sup> pass

*Subject 8*

Sex: Male

Age: 25

Occupation: driver

Income: Rs 1.3 lakh p.a.

Family: Father, mother, two younger brothers

Residence: own three rooms near Gurgaon. There are fans and lights in all rooms

Assets: TV, motorcycle, two cows

Education: 10<sup>th</sup> pass

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<sup>i</sup> Vipin Veetil, CCS, *Government Expenditure on Elementary and Secondary Education in Delhi from 1993-94 to 2003-04* (New Delhi: 2005), 10. The figure we have taken is the average actual per student expenditure in MCD schools in 2003-04. The figure is probably higher now.