Measuring Time Use in Rural India: Design and Validation of a Low-Cost Survey Module

January 8, 2022

1 Methodological Appendix

1.1 Respondent Instructions for Hybrid Method

• The following instructions were given by surveyors to respondents in the field for the Hybrid Method:

Kindly recollect the activities that you took part in since you woke up yesterday. I am going to ask you about the time you spent on broadly these activities - sleeping, income generating activities, household chores (non-income generating activities), child care and leisure.

I have 24 chips representing 24 hours; each chip is equivalent to one hour. I am going to ask you some questions that will help us divide these chips across these activities based on how much time you spent on them.

There is no need to be exact; you can give us approximate time spent on these activities.

1. When did you sleep the day before yesterday and what time did you wake up yesterday? (Surveyor: allocate tokens to the sleep card)

- 2. What did you do after waking up?
- 3. How much time did you spend on that activity? (Surveyor: Allocate tokens to the respective picture card)
- 4. What is the next activity that you did?

Apart from this we will also be asking you if you engaged in any passive care of your children. Please note that by passive care we mean you were simply supervising your child but were primarily involved in some other activity. Do not confuse this with active childcare.

For example - if you cooked for 3 hours but, say, for 2 of those hours you also supervised your child who was playing next to you—that would count as passive child care.

• Surveyors then followed the following protocol for recording passive care time:

Surveyor: Kindly fill in the minutes of passive childcare in the relevant activity category or categories. Choose the category where the respondent while engaging in that activity also looked out or supervised her children.

For example, if while cooking for 2 hours, the woman engaged in passive childcare for 1.5 hours, then in "Household chores inside the house" category record $1.5 \times 60 = 90$ minutes.

Please note that passive childcare minutes should not exceed the time you filled in the active activity category in the 24-hour slot.

For example, if the respondent cooked for 4 hours and engaged in passive care care during that time, that means passive care shouldn't be higher than 4x60=240 minutes.

1.2 Picture Cards and Descriptions used for Hybrid Method

The following images and descriptions were used in the field for the Hybrid method. These images were intended to provide supplementary reference materials to ensure that respondents of all literacy levels could gain an understanding of the eight activity categories used in the survey.

Time Use Study FBA Method Picture Cards: MALE and FEMALE

Pictures showing a man were only used while surveying the men in our sample while pictures showing a woman were only used while surveying the women in our sample. Wherever there is only one picture under a category—that was a common picture used across both male and female surveys.

1. Sleeping a) At night b) During the day



2. Working on own (household's) field





3. Income generating work specific to daily /regular wage

a) Working on someone else's field b) Construction work c) Other work for pay



4. Self-employed income generating activities. Like:
a) Cattle rearing b) Making cow dung cakes for selling purpose c) Sewing d) Making baskets e) Making beedis f) Domestic work on someone else's house g) Working as a piece rate worker





5. Household chores/unpaid work outside the house. Like:
 a) Collecting water b) Collecting firewood c) Cleaning clothes at river d) Grocery shopping



6. Household chores/unpaid work inside the house

Like: a) Cooking b) Cleaning the house (sweeping and mopping) c) Cleaning clothes (inside the house)



7. Actively taking care/sick/elderly of your children
a) Bathing b) Clothing c) Bringing to school d) Feeding e) Helping with homework f) Playing (actively) with kids (not passively playing with the kid while simultaneously working on some other task)



8. Relaxing/Leisure:

- a) Resting b) Bathing, getting ready, eating c) Talking to family members or neighbours d) Watching TV or listening to the radio TV e) Attending weddings, funerals and other functions



PASSIVE Child Care

Taking care of the child on the side while actively engaged in another activity/task



1.3 Activity Crosswalks

| _ | 4 |
|---|---|
| | _ |
| _ | 4 |
| | |

Table 1: 8 Hybrid Codes

| Hybrid Code | Table 1: 8 Hybrid Codes Activity |
|-------------|--|
| 1 | Sleeping a) At night b) Nap during the day |
| 2 | Working on own (household's) field? |
| 3 | Income generating work specific to daily /regular wage a) Working on someone else s field b) Construction work c) Other work for pay |
| 4 | Self-employed income generating activities. Like: a) Cattle rearing b) Making cow dung cakes for selling purpose c) Sewing d) Making baskets e) Making beedis f) Domestic work on someone else s house |
| 5 | Household chores/unpaid work outside the house. Like: a) Collecting water b) Collecting firewood c) Cleaning clothes at river d) Grocery shopping |
| 6 | Household chores/unpaid work inside the house. Like: a) Cooking b) Cleaning the house (sweeping and mopping) c) Cleaning clothes (inside the house) |
| 7 | Actively providing care (for children/sick/elderly) with no other activity overlap? a) Bathing b) Clothing c) Bringing to school d) Feeding e) Helping with homework f) Playing g) Taking care of elders/sick |
| 8 | Relaxing/Leisure: a) Resting b) Bathing, getting ready, eating c) Talking to family members or neighbours d) Watching TV or listening to the radio TV e) Attending weddings, funerals and other functions |

Table 2: Cross-Method Activity Crosswalk -Categories for Traditional Approach, 1998 Indian Time Use Survey

| Traditional Code | Activity | Hybrid Code | TUS 98 Hybrid Code |
|---------------------|---|--------------------------|--------------------------|
| 1 [111] | Ploughing, preparing land, cleaning of land | 2 if Unpaid 3 if Paid | 2 if Unpaid 3 if Paid |
| 2 [112] | Sewing, planting, transplanting | 2 if Unpaid 3 if Paid | 2 if Unpaid 3 if Paid |
| 3 [113] | Application of manure, fertilizer, pesticides and watering, preparing organic/manure. Harvesting, threshing, picking, winnowing | 2 if Unpaid 3 if Paid | 2 if Unpaid 3 if Paid |
| 4 [114] | Weeding | 2 if Unpaid 3 if Paid | 2 if Unpaid 3 if Paid |
| 5 [115] | Supervision of work | 2 if Unpaid 3 if Paid | 2 if Unpaid 3 if Paid |
| 6 [116] | Kitchen gardening - backyard cultivation | 2 if Unpaid 4 if Paid | 2 if Unpaid 4 if Paid |
| 7 [117] | Stocking, transporting to home, guarding or protection of crops | 2 if Unpaid 3 if Paid | 2 if Unpaid 3 if Paid |
| 8 [118] | Sale and purchase related activities | 4 | 2 if Unpaid 3 if Paid |
| 9 [119] | Travel to the work | 2 if Unpaid 3 if Paid | 2 if Unpaid 3 if Paid |
| 10 [121] | Grazing animals outside | 4 | 4 if Paid 5 if Unpaid |
| 11 [122] | Tending animals - cleaning, washing shed, feeding, watering, preparation of feed. | 4 | 4 if Paid 5 if Unpaid |
| 12 [123] | Caring for animals: breeding, shearing, medical treatment, grooming, shoeing etc. | 4 | 4 if Paid 5 if Unpaid |
| 13 [124] | Milking and processing of milk. Collecting, storing of poultry products | 4 | 4 if Paid 5 if Unpaid |
| 14 [125] | Making dung cakes | 4 | 4 if Paid 5 if Unpaid |
| 15 [126] | Poultry rearing - feeding, cleaning. | 4 | 4 if Paid 5 if Unpaid |
| 16 [127] | Other related activities. | 4 | 4 if Paid 5 if Unpaid |
| 17 [128] | Sale and purchase related activities | 4 | 4 if Paid 5 if Unpaid |
| 18 [129] | Travel to the work | 4 | 4 if Paid 5 if Unpaid |
| 19 [131] | Nursery - seedlings | 2 if Unpaid 3 if Paid | 2 if Unpaid 3 if Paid |
| 20 [132] | Planting, tending, processing of trees. | 2 if Unpaid 3 if Paid | 2 if Unpaid 3 if Paid |
| 21 [133] | Collecting, storing & stocking of fruits etc. | 2 if Unpaid 3 if Paid | 2 if Unpaid 3 if Paid |
| 22 [134] | Wood cutting, chopping & stocking firewood | 5 if Unpaid 4 if Paid | 5 if Unpaid 4 if Paid |
| 23 [135] | Fish farming, feeding fish, catching fish, gathering other aquatic life | 5 if Unpaid 4 if Paid | 5 if Unpaid 4 if Paid |
| 24 [136] | Care of house plants, indoor and outdoor garden work | 5 if Unpaid 3 if Paid | 5 if Unpaid 3 if Paid |

| 25 [137] | Flower gardening -landscaping, maintenance, cutting, collecting, storing | 5 if Unpaid 3 if Paid | 5 if Unpaid 3 if Paid |
|----------|--|--------------------------|--------------------------|
| 26 [138] | Sale and purchase related activities | 4 | 5 if Unpaid 3 if Paid |
| 27 [139] | Traveling to the work | 5 if Unpaid 4 if Paid | 5 if Unpaid 4 if Paid |
| 28 [140] | Fetching of water | 5 | 5 |
| 29 [141] | Collection of fruits, vegetables, berries, mushrooms etc. edible goods | 5 if Unpaid 4 if Paid | 5 if Unpaid 4 if Paid |
| 30 [142] | Collection of minor forest produce, leaves, bamboo, etc. | 5 if Unpaid 4 if Paid | 5 if Unpaid 4 if Paid |
| 31 [143] | Collection of fuelfuel woodtwigs. | 5 if Unpaid | 5 if Unpaid |
| | | 4 if Paid | 4 if Paid |
| 32 [144] | Collection of raw material for crafts. | 5 if Unpaid 4 if Paid | 5 if Unpaid 4 if Paid |
| 33 [145] | Collection of building materials | 5 if Unpaid | 5 if Unpaid |
| | | 4 if Paid | 4 if Paid |
| 34 [146] | Collection of fodder | 5 if Unpaid 4 if Paid | 5 if Unpaid 4 if Paid |
| 35 [147] | Sale and purchase related activities | 4 | 5 if Unpaid 4 if Paid |
| 36 [148] | Collection of other items | 5 if Unpaid 4 if Paid | 5 if Unpaid 4 if Paid |
| 37 [149] | Travel to work. | 5 if Unpaid | 5 if Unpaid |
| | | 4 if Paid | 4 if Paid |
| 38 [152] | Milling, husking, pounding | 5 if Unpaid 3 if Paid | 5 if Unpaid 3 if Paid |
| 39 [153] | Parboiling | 5 if Unpaid 4 if Paid | 5 if Unpaid 4 if Paid |
| 40 [154] | Sorting, Grading | 5 if Unpaid | 5 if Unpaid |
| [] | <u></u> | 4 if Paid | 4 if Paid |
| 41 [155] | Grinding, crushing | 5 if Unpaid 4 if Paid | 5 if Unpaid 4 if Paid |
| 42 [156] | Any other related activity | 5 if Unpaid | 5 if Unpaid |
| | | 4 if Paid | 4 if Paid |
| 43 [157] | Sales and purchase related activities | 4 | 5 if Unpaid 4 if Paid |
| 44 [159] | Travel for the work | 4 | 4 |
| 45 [161] | $\label{thm:mining-digging-quarrying} \ \ \text{of stone, slabs, breaking of stones} \ \ \text{for construction of} \ \ \ \text{of} \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \$ | 5 if Unpaid 3 if Paid | 5 if Unpaid 3 if Paid |
| 46 [162] | Building road, bridges etc. | 5 if Unpaid 3 if Paid | 5 if Unpaid 3 if Paid |
| 47 [163] | Digging out clay, gravel and sand | 5 if Unpaid 3 if Paid | 5 if Unpaid 3 if Paid |
| 48 [164] | Digging out minerals | 5 if Unpaid 3 if Paid | 5 if Unpaid 3 if Paid |

| 49 [165] | Transporting in vehicles | 5 if Unpaid 3 if Paid | 5 if Unpaid 3 if Paid |
|---|--|--|---|
| 50 [166] | Storing, stocking | 5 if Unpaid 3 if Paid | 5 if Unpaid 3 if Paid |
| 51 [167] | Any other related activity | 5 if Unpaid 3 if Paid | 5 if Unpaid 3 if Paid |
| 52 [168] | Sale and purchase related activity | 3 | 5 if Unpaid 3 if Paid |
| 53 [169] | Travel for the work | 5 if Unpaid 3 if Paid | 5 if Unpaid 3 if Paid |
| 54 [211] | Building & construction of dwelling (laying bricks, plastering, that ching, bamboo work, roofing) and maintenance and repairing of dwelling. | 5 if Unpaid 3 if Paid | 5 if Unpaid 3 if Paid |
| 55 [212] | Construction and repair of animal shed, shelter for poultry etc. | 5 if Unpaid 3 if Paid | 5 if Unpaid 3 if Paid |
| 56 [213] | Construction of wall. storage facility, fencing etc, irrigation work. | 5 if Unpaid 3 if Paid | 5 if Unpaid 3 if Paid |
| 57 [214] | $Construction\ of\ public\ works common\ infrastructure\ -\ roads,\ buildings,\ bridges,\ etc.$ | 5 if Unpaid 3 if Paid | 5 if Unpaid 3 if Paid |
| 58 [217] | Any other activity related. | 5 if Unpaid 3 if Paid | 5 if Unpaid 3 if Paid |
| 59 [218] | Sales and purchase related activity | 5 if Unpaid 3 if Paid | 5 if Unpaid 3 if Paid |
| 60 [219] | Travel to the work | 5 if Unpaid 3 if Paid | 3 if Paid 5 if Unpaid |
| (1 [221] | Food processing and cooking for sale - making pickles. spices and other products; | | 4 |
| 61 [221] | canning fruits, jams & jellies; baking; beverage preparation, selling readymade food etc. | 4 | 4 |
| 62 [222] | | 4 if Paid 6 if Unpaid | 4 if Paid 6 if Unpaid |
| | canning fruits, jams & jellies; baking; beverage preparation, selling readymade food etc. | 4 if Paid | 4 if Paid |
| 62 [222] | canning fruits, jams & jellies; baking; beverage preparation, selling readymade food etc. Butchering, curing, processing, drying storing etc. of meat, fish etc. Manufacturing of textiles - spinning, weaving, processing of textiles; knitting, sewing, | 4 if Paid 6 if Unpaid 4 if Paid | 4 if Paid 6 if Unpaid 4 if Paid |
| 62 [222] 63 [223] | canning fruits, jams & jellies; baking; beverage preparation, selling readymade food etc. Butchering, curing, processing, drying storing etc. of meat, fish etc. Manufacturing of textiles - spinning, weaving, processing of textiles; knitting, sewing, garment making of cotton, wool and other material. Making handicrafts, pottery, printing and other crafts made primarily with hands. | 4 if Paid 6 if Unpaid 4 if Paid 6 if Unpaid 4 if Paid | 4 if Paid 6 if Unpaid 4 if Paid 6 if Unpaid 4 if Paid |
| 62 [222] 63 [223] 64 [224] | canning fruits, jams & jellies; baking; beverage preparation, selling readymade food etc. Butchering, curing, processing, drying storing etc. of meat, fish etc. Manufacturing of textiles - spinning, weaving, processing of textiles; knitting, sewing, garment making of cotton, wool and other material. Making handicrafts, pottery, printing and other crafts made primarily with hands. (wood based leather based crafts, embroidery work etc.) | 4 if Paid 6 if Unpaid | 4 if Paid 6 if Unpaid 4 if Paid 6 if Unpaid 4 if Paid 6 if Unpaid 4 if Paid |
| 62 [222] 63 [223] 64 [224] 65 [225] | canning fruits, jams & jellies; baking; beverage preparation, selling readymade food etc. Butchering, curing, processing, drying storing etc. of meat, fish etc. Manufacturing of textiles - spinning, weaving, processing of textiles; knitting, sewing, garment making of cotton, wool and other material. Making handicrafts, pottery, printing and other crafts made primarily with hands. (wood based leather based crafts, embroidery work etc.) Fitting, installing, tool setting, tool and machinery - moulding, welding, tool making, | 4 if Paid 6 if Unpaid 4 if Paid 5 if Unpaid | 4 if Paid 6 if Unpaid 4 if Paid 6 if Unpaid 4 if Paid 6 if Unpaid 4 if Paid 5 if Unpaid 4 if Paid 5 if Unpaid |
| 62 [222] 63 [223] 64 [224] 65 [225] 66 [226] | canning fruits, jams & jellies; baking; beverage preparation, selling readymade food etc. Butchering, curing, processing, drying storing etc. of meat, fish etc. Manufacturing of textiles - spinning, weaving, processing of textiles; knitting, sewing, garment making of cotton, wool and other material. Making handicrafts, pottery, printing and other crafts made primarily with hands. (wood based leather based crafts, embroidery work etc.) Fitting, installing, tool setting, tool and machinery - moulding, welding, tool making, Assembling machines, equipment and other products, Production related work in large and small factories in different industries - as production workers, maintenance workers paid trainees and apprentices, sales, | 4 if Paid 6 if Unpaid 4 if Paid 6 if Unpaid 4 if Paid 6 if Unpaid 4 if Paid 5 if Unpaid 4 if Paid 5 if Unpaid | 4 if Paid 6 if Unpaid 4 if Paid 6 if Unpaid 4 if Paid 6 if Unpaid 4 if Paid 5 if Unpaid 4 if Paid 5 if Unpaid 3 4 if Paid 3 |
| 62 [222] 63 [223] 64 [224] 65 [225] 66 [226] 67 [227] | canning fruits, jams & jellies; baking; beverage preparation, selling readymade food etc. Butchering, curing, processing, drying storing etc. of meat, fish etc. Manufacturing of textiles - spinning, weaving, processing of textiles; knitting, sewing, garment making of cotton, wool and other material. Making handicrafts, pottery, printing and other crafts made primarily with hands. (wood based leather based crafts, embroidery work etc.) Fitting, installing, tool setting, tool and machinery - moulding, welding, tool making, Assembling machines, equipment and other products, Production related work in large and small factories in different industries - as production workers, maintenance workers paid trainees and apprentices, sales, administration and management activities. | 4 if Paid 6 if Unpaid 4 if Paid 6 if Unpaid 4 if Paid 6 if Unpaid 4 if Paid 5 if Unpaid 4 if Paid 5 if Unpaid 3 | 4 if Paid 6 if Unpaid 4 if Paid 6 if Unpaid 4 if Paid 6 if Unpaid 4 if Paid 5 if Unpaid 4 if Paid 5 if Unpaid 3 |
| 62 [222] 63 [223] 64 [224] 65 [225] 66 [226] 67 [227] | canning fruits, jams & jellies; baking; beverage preparation, selling readymade food etc. Butchering, curing, processing, drying storing etc. of meat, fish etc. Manufacturing of textiles - spinning, weaving, processing of textiles; knitting, sewing, garment making of cotton, wool and other material. Making handicrafts, pottery, printing and other crafts made primarily with hands. (wood based leather based crafts, embroidery work etc.) Fitting, installing, tool setting, tool and machinery - moulding, welding, tool making, Assembling machines, equipment and other products, Production related work in large and small factories in different industries - as production workers, maintenance workers paid trainees and apprentices, sales, administration and management activities. Sale and purchase related activity | 4 if Paid 6 if Unpaid 4 if Paid 6 if Unpaid 4 if Paid 6 if Unpaid 4 if Paid 5 if Unpaid 4 if Paid 5 if Unpaid 3 | 4 if Paid 6 if Unpaid 4 if Paid 6 if Unpaid 4 if Paid 6 if Unpaid 4 if Paid 5 if Unpaid 5 if Unpaid 3 4 if Paid 5 if Unpaid 3 |
| 62 [222] 63 [223] 64 [224] 65 [225] 66 [226] 67 [227] 68 [228] 69 [229] | canning fruits, jams & jellies; baking; beverage preparation, selling readymade food etc. Butchering, curing, processing, drying storing etc. of meat, fish etc. Manufacturing of textiles - spinning, weaving, processing of textiles; knitting, sewing, garment making of cotton, wool and other material. Making handicrafts, pottery, printing and other crafts made primarily with hands. (wood based leather based crafts, embroidery work etc.) Fitting, installing, tool setting, tool and machinery - moulding, welding, tool making, Assembling machines, equipment and other products, Production related work in large and small factories in different industries - as production workers, maintenance workers paid trainees and apprentices, sales, administration and management activities. Sale and purchase related activity Travel for the work Buying and selling goods - such as capital goods, intermediate goods, consumer | 4 if Paid 6 if Unpaid 4 if Paid 6 if Unpaid 4 if Paid 6 if Unpaid 4 if Paid 5 if Unpaid 4 if Paid 5 if Unpaid 3 | 4 if Paid 6 if Unpaid 4 if Paid 6 if Unpaid 4 if Paid 6 if Unpaid 4 if Paid 5 if Unpaid 3 4 if Paid 3 4 if Paid 5 if Unpaid 3 |

| 73 [314] | Transporting in hand carts, animal carts, cycle rickshaws etc. or manually | 4 | 4 |
|-----------|--|---|---|
| 74 [315] | Transport of passenger by motorized and non-motorised transports | 4 | 4 |
| 75 [317] | Any other activity | 4 | 4 |
| 76 [319] | Travel to work | 4 | 4 |
| 77 [321] | Service in Government and semi government organisations (salaried) | 3 | 3 |
| 78 [322] | Service in-private organisations (salaried) | 3 | 3 |
| 79 [323] | Petty service: domestic servants, sweepers, washers, pujari, barber, cobbler, mali massaging, prostitution, (wages) watching and guarding | 3 | 3 |
| 80 [324] | Professional services: medical and educational services (private tution, non formal teaching etc.), financial services and management and technical consultancy services | 3 | 3 |
| 81 [325] | $\label{thm:professional} Professional services: computer services, Xerox/photocopying services, beauty parlours, hair cutting saloons etc.$ | 3 | 3 |
| 82 [326] | Technical services: plumbing, electrical and electronic repair and maintenance and other related services | 3 | 3 |
| 83 [327] | Others | 3 | 3 |
| 84 [329] | Travel to work | 3 | 3 |
| 85 [N/A] | Preparing and cooking meals | 6 | 6 |
| N/A [411] | Cleaning food items, beverages, and serving | 6 | 6 |
| 86 [421] | Cleaning and upkeep of dwelling and surroundings | 6 | 6 |
| 87 [422] | Cleaning of utensils | 6 | 6 |
| 88 [431] | Care of textiles: sorting, mending, washing, ironing and ordering clothes and linen | 6 | 6 |
| 89 [441] | Shopping for goods and non-personal services: capital goods, household appliances, equipment, food and various household supplies. | 6 | 6 |
| 90 [451] | Household Management: planning, supervising, paying bills, etc. | 6 | 6 |
| 91 [461] | Do-it-yourself home improvements and maintenance, installation, servicing and repair of personal and household goods $$ | 6 | 6 |
| 92 [471] | Pet care | 6 | 6 |
| 93 [481] | Travel related to household maintenance, management and shopping | 5 | 5 |
| N/A [491] | Household maintenance, management, and shopping not elsewhere classified | 5 if Outside Household 6 if Within Household | 5 if Outside Household 6 if Within Household |
| 94 [511] | Physical care of children: washing, dressing, feeding | 7 | 7 |
| 95 [521] | Teaching, training and instruction of own children | 7 | 7 |
| 96 [531] | Accompanying children to places: school, sports, lessons, etc./PHC/doctor | 7 | 7 |
| 97 [541] | Physical care of the sick, disabled, elderly household members: washing, dressing, feeding, helping. | 7 | 7 |
| 98 [551] | Accompanying adults to receive personal care services: such as hairdresser's therapy sessions, temple, religious places etc. | 7 | 7 |

| 99 [561] | Supervising children needing care - with or without other activities | 7 | 7 |
|-----------|--|---|---|
| 100 [562] | Supervising adults needing care - with or without other activities. | 7 | 7 |
| 101 [571] | Travel related to care of children | 7 | 7 |
| 102 [572] | Travel related to care of adults and others | 7 | 7 |
| 103 [581] | Taking care of guests/visitors | 7 | 7 |
| 104 [591] | Any other activity not mentioned above | 7 | 7 |
| 105 [611] | $Community\ organised\ construction\ and\ repairs:\ buildings,\ roads,\ dams,\ wells,\ ponds\ etc.\ community\ assets.$ | 5 if Unpaid 3 if Paid | 5 if Unpaid 3 if Paid |
| 106 [621] | Community organised work: cooking for collective celebrations, etc. | 5 if Unpaid 3 if Paid | 5 if Unpaid 3 if Paid |
| 107 [631] | $\label{thm:continuous} \begin{tabular}{ll} Volunteering with for an organisation (which does not involve working directly for individuals) \end{tabular}$ | 5 if Unpaid 3 if Paid | 5 if Unpaid 3 if Paid |
| 108 [641] | Volunteer work through organisations extended directly to individuals and groups | 5 if Unpaid 3 if Paid | 5 if Unpaid 3 if Paid |
| 109 [651] | Participation in meetings of local and informal groups/caste, tribes, professional associations, union fratemal and political organisations | 5 if Unpaid 3 if Paid | 5 if Unpaid 3 if Paid |
| 110 [661] | $Involvement\ in\ civic\ and\ related\ responsibilities:\ voting,\ rallies,\ attending\ meetings,\ panchayat$ | 5 if Unpaid 3 if Paid | 5 if Unpaid 3 if Paid |
| 111 [671] | Informal help to other households | 5 if Unpaid 3 if Paid | 5 if Unpaid 3 if Paid |
| 112 [681] | Community services not elsewhere classified | 5 if Unpaid 3 if Paid | 5 if Unpaid 3 if Paid |
| 113 [691] | Travel related to community services | 5 if Unpaid 3 if Paid | 5 if Unpaid 3 if Paid |
| 114 [711] | General Education: School/university/other educational institutions attendance | 5 if Outside Household 6 if Within Household | 5 if Outside Household 6 if Within Household |
| 115 [721] | Studies, homework and course review related to general education | 5 if Outside Household 6 if Within Household | 5 if Outside Household 6 if Within Household |
| 116 [731] | Additional study, non-formal education under adult education programmes. | 5 if Outside Household 6 if Within Household | 5 if Outside Household 6 if Within Household |
| 117 [741] | Non formal education by children | 5 if Outside Household 6 if Within Household | 5 if Outside Household 6 if Within Household |
| 118 [751] | Work-related training | 5 if Outside Household 6 if Within Household | 5 if Outside Household 6 if Within Household |
| 119 [761] | Training under government programmes such as TRYSEM, DWCRA and others. | 5 if Outside Household 6 if Within Household | 5 if Outside Household 6 if Within Household |
| 120 [771] | Other training/education | 5 if Outside Household 6 if Within Household | 5 if Outside Household 6 if Within Household |
| 121 [781] | Learning not elsewhere classified | 5 if Outside Household 6 if Within Household | 5 if Outside Household 6 if Within Household |
| 122 [791] | Travel related to learning | 5 if Outside Household 6 if Within Household | 5 if Outside Household 6 if Within Household |

| 123 [811] | Participating in social events: wedding, funerals, births, and other celebrations | 8 | 8 |
|-----------|--|---|---|
| 124 [812] | Participating in religious activities: Church services, religious ceremonies, practices, kirtans, singing, etc. $$ | 8 | 8 |
| 125 [813] | Participating in community functions in music, dance etc. | 8 | 8 |
| 126 [814] | Socializing at home and outside the home. | 8 | 8 |
| 127 [821] | Arts, making music, hobbies and related courses: | 8 | 8 |
| 128 [822] | Indoor and outdoor sports participation and related | 8 | 8 |
| N/A [831] | Games and other pastimes | 8 | 8 |
| 129 [832] | Spectator to sports, exhibitions/museums, cinema/theatre/concerts and other performances and events | 8 | 8 |
| 130 [841] | Other related activities. | 8 | 8 |
| 131 [851] | Reading, other than newspaper and magazines. | 8 | 8 |
| 132 [852] | Watching television and video | 8 | 8 |
| 133 [853] | Listening to music/radio | 8 | 8 |
| 134 [861] | Accessing information by computing | 8 | 8 |
| 135 [862] | Visiting library | 8 | 8 |
| 136 [863] | Reading newspaper, magazines | 8 | 8 |
| 137 [871] | Mass media use and entertainment not classified elsewhere such as mobile phone usage, social media | 8 | 8 |
| 138 [891] | Travel related to social, cultural and recreational activities, social, cultural and recreational activities, Social, cultural and recreational activities not elsewhere classified, mass media use and entertainment. | 8 | 8 |
| 139 [892] | Travel relating to search of jobs. | 8 | 8 |
| 140 [911] | Sleep and related activities | 1 | 1 |
| 141 [921] | Eating and drinking | 8 | 8 |
| 142 [922] | Smoking, drinking alcohol and other intoxicants. | 8 | 8 |
| 143 [931] | Personal Hygiene and health | 8 | 8 |
| 144 [932] | Walking, exercise mining, jogging, yoga, etc. | 8 | 8 |
| 145 [941] | Receiving medical and personal care from professional | 8 | 8 |
| 146 [942] | Receiving medical and personal care from household members. | 8 | 8 |
| 147 [951] | Talking, gossiping and quarreling | 8 | 8 |
| 148 [961] | Doing nothing, rest and relaxation | 8 | 8 |
| 149 [971] | Individual religious practices and meditation | 8 | 8 |
| 150 [981] | Other activities | 8 | 8 |

| 152 [992] | Travel related to personal care and self-maintenance | 8 | 8 | |
|-----------|--|---|---|--|
| | | | | |
| 151 [982] | Resting/convalescing due to physical illness and physically unwell persons | 8 | 1 | |

Note: 1998 India Time Use Survey activity codes in brackets. Activity codes used in our own data outside brackets. In the case of activities that do not have payment status, we assume the activity is unpaid.

Table 3: Cross-Method Activity Crosswalk -Categories for Traditional Approach, 2019 Indian Time Use Survey

| Traditional Code | Activity | Hybrid Code |
|---------------------|---|--------------------------------------|
| 110 | Employment in corporations, government and non-profit institutions | 3 if Wage Work 4 if Self-employed |
| 121 | Growing of crops for the market in household enterprises | 3 if Wage Work 2 if Self-employed |
| 122 | Raising animals for the market in household enterprises | 3 if Wage Work 4 if Self-employed |
| 123 | Forestry and logging for the market in household enterprises | 3 if Wage Work 4 if Self-employed |
| 124 | Fishing for the market in household enterprises | 3 if Wage Work 4 if Self-employed |
| 125 | Aquaculture for the market in household enterprises | 3 if Wage Work 4 if Self-employed |
| 126 | Mining and quarrying for the market in household enterprises | 3 if Wage Work 4 if Self-employed |
| 127 | Making and processing goods for the market in household enterprises | 3 if Wage Work 4 if Self-employed |
| 128 | Construction activities for the market in household enterprises | 3 if Wage Work 4 if Self-employed |
| 129 | Other activities related to employment in household enterprises to produce goods | 3 if Wage Work 4 if Self-employed |
| 131 | Vending and trading of goods in household enterprises | 3 if Wage Work 4 if Self-employed |
| 132 | Providing paid repair, installation, maintenance and disposal in households and household enterprises | 3 if Wage Work 4 if Self-employed |
| 133 | Providing paid business and professional services in households and household enterprises | 3 if Wage Work 4 if Self-employed |
| 134 | Transporting goods and passengers for pay or profit in households and household enterprises | 3 if Wage Work 4 if Self-employed |
| 135 | Providing paid personal care services in households and household enterprises | 3 if Wage Work 4 if Self-employed |
| 136 | Providing paid domestic services | 3 if Wage Work 4 if Self-employed |

| 139 | Other activities related to employment in households and household enterprises providing services | 3 if Wage Work 4 if Self-employed |
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| 141 | Activities ancillary to employment | 3 if Wage Work 4 if Self-employed |
| 142 | Breaks during working time within employment | 3 if Wage Work 4 if Self-employed |
| 150 | Training and studies in relation to employment | 5 if Outside Household 6 if Within Household |
| 160 | Seeking employment | 8 |
| 170 | Setting up a business | 4 |
| 181 | Employment-related travel | 4 |
| 182 | Commuting | 4 |
| 211 | Growing crops and kitchen gardening, for own final use | 2 |
| 212 | Farming of animals and production of animal products, for own final use | 5 |
| 213 | Hunting, trapping and production of animal skins, for own final use | 5 |
| 214 | Forestry and logging, for own final use | 5 |
| 215 | Gathering wild products, for own final use | 5 |
| 216 | Fishing, for own final use | 5 |
| 217 | Aquaculture, for own final use | 5 |
| 218 | Mining and quarrying, for own final use | 5 |
| 221 | Making, processing food products, beverages and tobacco for own final use | 6 |
| 222 | Making, processing textiles, wearing apparel, leather and related products, for own final use | 6 |
| 223 | Making, processing of wood and bark products, for own final use | 5 |
| 224 | Making, processing bricks, concrete slabs, hollow blocks, tiles for own final use | 5 |

| 225 | final use | 6 |
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| 226 | Making, processing metals and metal products for own final use | 5 |
| 227 | Making, processing of products using other materials for own final use | 5 |
| 229 | Acquiring supplies and disposing of products and other activities related to making and processing goods for own final use | 5 |
| 230 | Construction activities for own final use | 5 |
| 241 | Gathering firewood and other natural products used as fuel for own final use | 5 |
| 242 | Fetching water from natural and other sources for own final use | 5 |
| 250 | Travelling, moving, transporting or accompanying goods or persons related to own-use production of goods | 5 |
| 311 | Preparing meals/snacks | 6 |
| 312 | Serving meals/snacks | 6 |
| 313 | Cleaning up after food preparation/meals/snacks | 6 |
| 314 | Storing, arranging, preserving food stocks | 6 |
| 319 | Other activities related to food and meals management and preparation | 6 |
| 321 | Indoor cleaning | 6 |
| 322 | Outdoor cleaning | 5 |
| 323 | Recycling and disposal of garbage | 5 |
| 324 | Upkeep of in/outdoor plants, hedges, garden, grounds, landscape, etc. | 5 |
| 325 | Tending furnace, boiler, fireplace for heating and water supply | 6 |
| 329 | Other activities related to cleaning and upkeep of dwelling and surroundings | 6 |
| 331 | Do-it-yourself improvement, maintenance and repair of own | 5 |

| 332 | goods including ICT equipment | 5 |
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| 333 | Vehicle maintenance and repairs | 5 |
| 339 | Other activities related to do-it-yourself decoration, maintenance and repair | 5 |
| 341 | Hand/machine-washing | 5 |
| 342 | Drying; hanging out, bringing in wash | 5 |
| 343 | Ironing/pressing/folding | 6 |
| 344 | Mending/repairing and care of clothes and shoes; cleaning and polishing shoes | 6 |
| 349 | Other activities related to care of textiles and footwear | 6 |
| 351 | Paying household bills | 6 |
| 352 | Budgeting, planning, organizing duties and activities in the household | 6 |
| 359 | Other activities related to household management | 6 |
| 361 | Daily pet care | 5 |
| 362 | Using veterinary care or other pet care services (grooming, stabling, holiday or day care) | 5 |
| 369 | Other activities related to pet care | 5 |
| 371 | Shopping for/purchasing of goods and related activities | 5 |
| 372 | Shopping for/availing of services and related activity | 5 |
| 380 | Travelling, moving, transporting or accompanying goods or persons related to unpaid domestic services for household and family members | 5 |
| 390 | Other unpaid domestic services for household and family members | 5 |
| 411 | Caring for children including feeding, cleaning, physical care | 7 |
| 412 | Providing medical care to children | 7 |
| 413 | Instructing, teaching, training, helping children | 7 |

| 414 | Talking with and reading to children | 7 |
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| 415 | Playing and sports with children | 7 |
| 416 | Minding children (passive care) | 7 |
| 417 | Meetings and arrangements with schools and child care service providers | 7 |
| 419 | Other activities related to childcare and instruction | 7 |
| 421 | Assisting dependent adults with tasks of daily living | 7 |
| 422 | Assisting dependent adults with medical care | 7 |
| 423 | Assisting dependent adults with forms, administration, accounts | 7 |
| 424 | Affective/emotional support for dependent adults | 7 |
| 425 | Passive care of dependent adult | 7 |
| 426 | Meetings and arrangements with adult care service providers | 7 |
| 429 | Other activities related to care for dependent adults | 7 |
| 431 | Feeding, cleaning, physical care for non-dependent adult household and family members including for temporary illness | 7 |
| 432 | Affective/emotional support for non-dependent adult household and family members | 7 |
| 439 | Other activities related to care for non-dependent adult household and family members | 7 |
| 441 | Travelling related to care-giving services for household and family members | 7 |
| 442 | Accompanying own children | 7 |
| 443 | Accompanying dependent adults | 7 |
| 444 | Accompanying non-dependent adult household and family members | 7 |
| 490 | Other activities related to unpaid caregiving services for household and family members | 7 |
| 511 | Unpaid volunteer household maintenance, management, construction, renovation and repair | 5 if Outside Household 6 if Within Household |

| 512 | Unpaid volunteer shopping/purchasing goods and services | 5 |
|-----|---|---|
| 513 | Unpaid volunteer childcare and instruction | 5 if Outside Household 6 if Within Household |
| 514 | Unpaid volunteer care for adults | 5 if Outside Household 6 if Within Household |
| 515 | Unpaid volunteer unpaid help in enterprises owned by other households | 5 |
| 519 | Other activities related to direct unpaid volunteering for other households | 5 |
| 521 | Unpaid volunteer work on road/building repair, clearing and preparing land, cleaning (streets, markets, etc.), and construction | 5 |
| 522 | Unpaid volunteer preparing/serving meals, cleaning up | 5 |
| 523 | Unpaid volunteer cultural activities, recreation and sports activities | 5 |
| 524 | Unpaid volunteer office/administrative work | 5 |
| 529 | Other activities related to community- and organization-based unpaid volunteering | 5 |
| 530 | Unpaid trainee work and related activities | 5 |
| 540 | Travelling time related to unpaid volunteer, trainee and other unpaid work | 5 |
| 590 | Other unpaid work activities | 5 |
| 611 | School/university attendance | 5 |
| 612 | Extra-curricular activities | 5 |
| 613 | Breaks at place of formal education | 5 |
| 614 | Self-study for distance education course work (video, audio, online) | 6 |
| 619 | Other activities related to formal education | 5 if Outside Household 6 if Within Household |
| 620 | Homework, being tutored, course review, research and activities related to formal education | 5 if Outside Household 6 if Within Household |

| 630 | Additional study, non-formal education and courses | 5 if Outside Household 6 if Within Household |
|-----|--|---|
| 640 | Travelling time related to learning | 5 |
| 690 | Other activities related to learning | 5 if Outside Household 6 if Within Household |
| 711 | Talking, conversing, chatting | 8 |
| 712 | Socializing/getting together/gathering activities | 8 |
| 713 | Reading and writing mail (including email) | 8 |
| 719 | Other activities related to socializing and communication | 8 |
| 721 | Participating in community celebrations of cultural/historic events | 8 |
| 722 | Participating in community rites/events (non-religious) of weddings, funerals, births and similar rites-of-passage | 8 |
| 723 | Participating in community social functions (music, dance, etc.) | 8 |
| 729 | Other activities related to community participation | 8 |
| 730 | Involvement in civic and related responsibilities | 8 |
| 741 | Private prayer, meditation and other spiritual activities | 8 |
| 742 | Participating in collective religious practice | 8 |
| 749 | Other activities related to religious practice | 8 |
| 750 | Travelling time related to socializing and communication, community participation and religious practice | 8 |
| 790 | Other activities related to socializing and communication, community participation and religious practice | 8 |
| 811 | Attendance at organized/mass cultural events, and shows | 8 |
| 812 | Attendance at parks/gardens | 8 |
| 813 | Attendance at sports events | 8 |
| 819 | Other activities related to attendance at cultural, entertainment and sports events | 8 |

| 821 | visual, literary and performing arts (as nobby) | 8 |
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| 822 | Hobbies | 8 |
| 823 | Playing games and other pastime activities | 8 |
| 829 | Other activities related to cultural participation, hobbies, games | 8 |
| 831 | Participating in sports | 8 |
| 832 | Exercising | 8 |
| 841 | Reading for leisure | 8 |
| 842 | Watching/listening to television and video | 8 |
| 843 | Listening to radio and audio devices | 8 |
| 849 | Other activities related to mass media use | 8 |
| 850 | Activities associated with reflecting, resting, relaxing | 8 |
| 860 | Travelling time related to culture, leisure, mass-media and sports practices | 8 |
| 890 | Other activities related to culture, leisure, mass-media and sports practices | 8 |
| 911 | Night sleep/essential sleep | 1 |
| 912 | Incidental sleep/naps | 1 |
| 913 | Sleeplessness | 1 |
| 919 | Other sleep and related activities | 1 |
| 921 | Eating meals/snack | 8 |
| 922 | Drinking other than with meal or snack | 8 |
| 931 | Personal hygiene and care | 8 |
| 932 | Health/medical care to oneself | 8 |
| 939 | Other activities related to personal hygiene and care | 8 |
| 941 | Receiving personal care from others | 8 |

| ç | 942 | Receiving health/medical care from others | 8 |
|---|-----|--|---|
| ç | 949 | Other activities related to receiving personal and health/medical care | 8 |
| ç | 950 | Travelling time related to self-care and maintenance activities | 8 |
| ç | 990 | Other self-care and maintenance activities | 8 |