

Identifying Drudgery Prone Home Activities in Rural Areas of Upper Brahmaputra Valley Zone of Assam

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ABSTRACT A study was conducted in Upper Brahmaputra Valley Zone of Assam on a sample of 500 rural women to identify drudgery prone household activities performed by rural women. Personal and demographic characteristics of rural women revealed that majority of respondents (55 per cent) belonged to a young age group, that is, between 20-30 years. Most of them (78%) were literate. It was observed that majority of the respondents performed the pre-cooking activity like bringing firewood and cutting vegetables daily. Among the household activities, occasional activities such as pounding of rice, de-husking etc. required more time followed by child care and cooking. Time requirements for all landholding categories were almost same. Time spent in leisure time activities increased with increase in landholding possession except for large landholding. Fetching water was the maximum drudgery prone home household activity for all the landholdings categories followed by cooking, cutting and bringing fuel-wood and mopping based on Drudgery Index.

INTRODUCTION

Woman is the manager in the home. Her role as a housewife is more crucial and very important in improving the quality of life of the family. Women in India suffer from grave disadvantages and are subject to a great deal of hardship and drudgery, particularly in rural areas. They work as long as 16 hours or more, right from daybreak till late in the night. They have to perform various household activities like cooking, washing clothes, washing vessels, fetching water, sweeping, mopping, cutting and bringing fuel-wood besides attending to various other needs of the family. Static muscular effort and incorrect body postures result in higher physiological cost to the body. The long hours of work, much effort and labor spent in respective home and farm operations result in fatigue and drudgery. Bimla et al. (2004) reported that rural women spent maximum time (129 minutes) in cooking activity followed by fetching water (113 minutes) and washing clothes (62 minutes). In spite of technological and scientific advancement, the rural women toil with burden of home as well as the farm. Recognizing the importance of reducing drudgery and to improve the efficiency of work, the present study was planned to find out Drudgery Index of home activities in terms of frequency of performance of household activities by rural women, time spent in household activities and degree of difficulty perceived.

MATERIAL AND METHODS

The study was carried out in Upper Brahmaputra Valley Zone of Assam which was selected

purposively. Six villages, namely, Do-goan, Kulumjogonia, Sokaikhongia, Bhatemora, Deori goan and Porbotia were selected randomly from the Jorhat district of Assam. The sample for the study comprised of 500 farm women and was drawn proportionately from these six villages by stratified random sampling method from four land-holding categories, that is, landless, small and marginal, medium and large. A descriptive research design was used to conduct the study. Survey method was adopted to collect the data. An interview schedule was used to elicit information from the women who were actively involved in household activities. Interview schedule mainly consisted of personal questions and demographic characteristics of respondents, frequency of performance, time spent (minutes/day) and difficulty felt by the respondents. The data were collected in the year 2007-08.

Drudgery Index (DI) was calculated on the basis of

X = coefficient pertaining to difficulty felt.

Y = Coefficient pertaining to time spent in particular home activity.

Z = Coefficient pertaining to frequency of performance

Drudgery Index = $[(X+Y+Z)/3] \times 100$.

RESULTS AND DISCUSSION

Findings pertaining to personal and demographic characteristics of rural women revealed that majority of respondents (55 percent) belonged to a young age group, that is, between 20-30 years. Most of them (78 percent) were literate. Seventy per cent respondents belonged to nuclear families. Nearly 35 per cent respondents

were from upper caste, which was followed by other backward castes (26 percent). The main occupation of the head of the family was found to be farming (44 percent). This was followed by 25 percent who were engaged in service. The subsidiary occupation of most of the households (40 percent) was also farming. It was found that a sizeable percentage of the respondents (62 percent) were from middle income group.

Frequency of Performance of Household

Activities: Data pertaining to performance was elicited in a five point scale viz., daily (5), alternate day (4), weekly (3), fortnightly (2) and seasonal (1). It was observed that majority of the respondents performed the precooking like bringing firewood and cutting vegetables daily. Cleaning of cereals and grinding and pounding were 'weekly' and 'monthly' and 'seasonally' performed activities. Activities like cooking, after cooking, serving food, sweeping, fetching water, washing of vessels, child care and personal care activities were performed daily by all the land holding categories. Weekly performed activities were dusting and mopping as reported by 41.22 and 43.78 percent respondents. Occasional and leisure time activities such as marketing, care of sick/elder person, pounding of rice for food preparation and weaving were per-

formed 'monthly' or 'seasonally' (as revealed by 85.67, 58.82, 42.67 and 82.47 percent respondents respectively) depending on their requirements (Table 1).

Time Spent in Households Activities: Perusal of data on time spent (Table 2) revealed that among the household activities, occasional activities require more time (182.71 min/day) for different landholding categories followed by child care activities requiring 103.60 min/day and cooking 84.16 min/day. The occasional activities included pounding of rice at home for indigenous food preparation and de-husking of rice etc. The respondent women of medium sized families spent more time (203.63 min/day) followed by large sized landholding families who spent 180.07 min/day, marginal and small ones spending 179.28 min/day and landless households consuming 167.90 min/day on occasional activities. Time spent on child care activities increased with increase in landholding possession except in large landholding category, as rural women of medium farm families spent more time (123.24 min/day) followed by small and marginal ones spending 119.80 min/day, landless spent 111.39 min/day and large landholding families spent 60 min/day. The reason behind this pattern was that majority of the selected

Table 1: Frequency of performance in household activities

Activities	Daily	Alternate day	Weekly	Fortnightly	Seasonally
1. <i>Pre-cooking Activities</i>					
a) Bringing firewood	4.33	2.87	12.35	9.19	71.26
b) Cleaning of cereal	15.38	6.56	44.57	13.34	20.15
c) Cutting vegetable	95.29	1.28	0.66	0.21	2.56
d) Grinding and pounding	11.67	7.39	21.80	19.85	39.29
2. <i>Cooking Activities</i>					
a) Breakfast preparation	97.73	0.68	0.68	-	0.91
b) Lunch preparation	93.80	0.21	0.44	-	5.55
c) Dinner preparation	93.44	2.74	0.63	0.21	2.95
d) Tea preparation	88.07	0.45	1.60	9.43	0.45
3. <i>After Cooking Activities</i>					
a) Cleaning of kitchen	93.01	1.76	2.18	1.09	1.96
b) Washing of vessels	97.14	1.53	0.87	0.43	-
4. <i>Serving Food</i>	94.36	2.92	1.04	0.83	0.80
5. <i>Cleaning of the House</i>					
a) Dusting	24.80	22.13	41.22	8.77	3.08
b) Sweeping	86.06	2.44	3.17	6.60	1.73
c) Mopping	10.27	11.62	43.78	25.96	8.37
6. <i>Fetching Water</i>	92.90	2.28	1.14	0.45	3.20
7. <i>Washing Clothes</i>	95.93	0.67	1.15	-	2.25
8. <i>Child Care Activities</i>	92.30	2.74	4.92	-	0.01
9. <i>Personal Care</i>	100	-	-	-	-
10. <i>Occasional Activities</i>					
a) Marketing	3.58	1.19	5.37	4.19	85.67
b) Care of sick person	35.29	-	1.96	3.93	58.82
c) Pounding of rice	-	-	-	18.54	81.46
11. <i>Leisure Time Activities</i>					
Weaving	14.39	1.57	0.26	1.32	82.46

households belonging to landless, marginal and small and medium landholding categories were having small children and only few members of large farm families were having small children. For cooking activities, landless farm women spent more time (85.32 min/day) followed by respondents belonging to large landholdings spending 84.97 min/day, marginal and small ones utilizing 84.65 min/day and medium sized households spending 81.74 min/day on same. Time requirements for all landholding categories is almost same because landless, marginal and small farm families prepared simple meals by using only firewood, but medium and large farm families prepared elaborate meals by using LPG/ Stove/Heater etc. (Table 2). Time spent on fetching water decreased with increase in landholding size. The reason behind this was that the source of water for landless, is some public water supply but for large farmers, water is fetched from the tube well/ ponds in their own compounds. Time spent in leisure time activities increased with increase in landholding possession except for large landholding categories.

Difficulty Felt in Performance of Household Activities: The perceived difficulty felt in performance of household activities was assessed in a five-point scale, that is, very easy (1), easy (2), neutral (3), difficult (4) and very difficult (5). Grinding and pounding, mopping, washing clothes and pounding of rice for food preparation were perceived as a difficult home activity by 27.23, 22.16, 25.73 and 26.26 percent respondents respectively (Table 3). Dusting, sweeping, marketing and care of sick person were perceived as an easy activity by 45.80, 43.03, 44.48 and 50.0 percent respondents respectively while only a meager percentage (19 percent) reported fetching water as the 'most difficult' household activity. Remaining activities, such as bringing

and cutting firewood, cleaning cereals, cutting vegetables, breakfast preparation, lunch preparation, dinner preparation, tea preparation, cleaning kitchen, washing of vessels, serving food, child-care, personal care (99.60%) and weaving, were reported as a very easy home activities by 33.04, 43.21, 51.28, 53.08, 43.58, 45.24, 52.75, 43.61, 34.50, 28.39, 51.64, 99.60 and 47.64% respondents respectively.

Drudgery Index of Household Activities

Drudgery index of household activities was determined by calculating the time co-efficient, frequency of performance coefficient and difficulty coefficient. Thereafter, three major drudgery prone households activities performed by rural women were selected based on Drudgery Index (DI). It is evident from Table 4 that fetching water and cooking were the maximum drudgery prone household activities for all the landholding categories. The difficulty index of fetching water was the highest for large farmers (DI=59.84) followed by medium (DI=59.5), landless (DI=59.23) and marginal and small (DI=57.8). For cooking activity, Drudgery Index was the highest in landless categories (DI=56.55), followed by marginal and small landholding households (DI=56.48), medium landholding households (DI=56.23) and large ones (DI=51.33). Similar findings were also observed by Bimla et al. (2006), in which fetching water, cooking and washing vessels were considered as three most drudgery prone activities in home sector for rural areas. Further, Borah (1998) revealed that drudgery score of rural women in performance Household tasks was 7.70 in 10 point scale indicating relatively high drudgery and also reported that adoption of improved household technology had positive effect on household work time.

Table 2: Time spent (minutes/day) in household activities by rural women

Activities	Landless N=81 (mean time/min)	Small and marginal N=339 (mean time/min)	Medium N=64 (mean time/min)	Large N=16 (mean time/min)	Total N=500 (mean time/min)
1. Pre-cooking activities	21.28	24.99	29.38	38.84	28.62
2. Cooking activities	45.32	44.65	41.72	44.97	44.15
3. After cooking activities	40.57	40.75	36.92	28.73	36.75
4. Serving food	29.00	31.01	24.34	40.00	31.09
5. Cleaning of the house	49.98	58.33	48.90	33.60	47.70
6. Fetching water	65.63	54.06	46.49	44.64	52.70
7. Washing clothes	58.42	56.63	46.53	47.93	52.37
8. Child care activities	111.39	119.80	123.24	60.00	103.60
9. Personal care	31.27	29.91	27.86	29.38	29.60
10. Occasional activities	167.90	179.28	203.63	180.07	182.71
11. Leisure time activities	94.06	85.98	68.46	102.64	87.94

Table 3: Difficulty felt in performance of households activities

Activities	Daily	Alternate day	Weekly	Fortnightly	Seasonally
1. <i>Pre-cooking Activities</i>					
a) Bringing firewood	33.04	29.35	11.76	20.68	5.17
b) Cleaning of cereal	43.21	35.97	18.09	2.48	0.25
c) Cutting vegetable	51.28	43.80	1.92	2.77	0.23
d) Grinding and pounding	23.34	26.07	16.73	27.23	6.61
2. <i>Cooking Activities</i>					
a) Breakfast preparation	53.08	42.56	2.01	2.00	0.22
b) Lunch preparation	43.58	41.67	1.06	6.06	8.00
c) Dinner preparation	45.24	39.74	0.03	0.40	2.95
d) Tea preparation	52.75	36.92	8.25	1.83	0.25
3. <i>After Cooking Activities</i>					
a) Cleaning of kitchen	43.61	41.48	7.86	7.02	0.21
b) Washing of vessels	34.50	29.00	16.48	15.16	4.86
4. <i>Serving Food</i>	28.39	22.99	22.75	18.55	7.32
5. <i>Cleaning of the House</i>					
a) Dusting	39.69	45.80	6.87	6.48	1.16
b) Sweeping	33	43.03	14.91	7.09	1.82
c) Mopping	18.64	21.08	18.91	22.19	19.18
6. <i>Fetching Water</i>	8.23	7.09	7.55	40.06	37.07
7. <i>Washing Clothes</i>	19.86	24.38	15.34	25.73	15.00
8. <i>Child Care Activities</i>	51.64	27.47	8.24	6.59	6.06
9. <i>Personal Care</i>	99.60	0.40	-	-	-
10. <i>Occasional Activities</i>					
a) Marketing	34.92	44.48	9.27	8.05	3.28
b) Care of sick person	28.00	50.00	12.00	6.00	4.00
c) Pounding of rice	22.20	17.50	10.62	26.26	23.44
11. <i>Leisure Time Activities</i>					
Weaving	47.64	41.36	2.61	3.14	5.25

Table 4: Drudgery Index for selected household activities

Home activities	Frequency coefficient	Difficulty coefficient	Average time spent coefficient	Drudgery Index
<i>Landless</i>				
Fetching water	0.97	0.80	0.007	59.23
Cooking	0.96	0.64	0.006	56.55
Cutting and bringing fuel-wood	0.99	0.50	0.006	52.76
<i>Marginal and Small</i>				
Fetching water	0.96	0.77	0.006	57.80
Fetching water	0.98	0.58	0.006	56.48
Cooking	0.99	0.44	0.007	52.22
<i>Medium</i>				
Fetching water	0.97	0.81	0.005	59.50
Cooking	0.99	0.41	0.005	56.23
Mopping	0.94	0.41	0.014	53.72
<i>Large</i>				
Fetching water	0.93	0.86	0.005	59.84
Cooking	0.64	0.86	0.047	51.33
Mopping	0.69	0.84	0.020	51.21

It is evident further from Table 4 that cutting and bringing firewood ranked third drudgery prone home activity for both landless households (DI=52.76) and marginal landholding categories (DI=52.22). In medium and large landhold-

ing categories, mopping ranked third drudgery prone household activity (DI=53.72 and DI=51.21 respectively). The various postures adopted for performance of these activities were sitting, standing and bending.

CONCLUSION

The foregoing analysis showed that the most of the household activities performed by rural women are drudgery prone as indicated by Drudgery Index. Introduction of household technologies as well as improvement of work methods would improve the health status of farm women to a great extent and enhance quality of life.

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