

Consumption Expenditure on Food in Typical Rural Farm Families in Arid Rajasthan

Rajasthan

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Abstract Cross section data on consumption of food and expenditure of 154 sample households in a cluster of six villages in Jodhpur tehsil in Rajasthan for the year 1989-90 has been analysed. The analysis revealed that the average household consumption expenditure of Rs. 105/- per consumer unit per month was below the All India poverty line expenditure at current prices. However, consumption in terms of calories was marginally below the poverty line norms in marginal (2705) small (2768) and medium (2758) farms against the recommended 2800 calories per consumer unit per day. The valuation of home grown cereal *bajra* and milk at farm gate prices, rather than at the retail market prices was found to be the factors behind the low consumption expenditure. The lower per capita production of cereals from ones own farms constrained the increased calorie intakes.

Key words Calorie, Consumer expenditure, Consumer unit, Poverty line

Arid Rajasthan, represent one of the harsh agroclimatic regions in the country, therefore, the availability (consumption) of food is virtually governed by the climate in the region. Jain *et al.* (1988), reported that the average level of living conditions in the region was better off compared to the other regions of the state. The present study does not pretend to examine the veracity of the statement owing to obvious reasons but only present the ground level realities with the help of cross section primary level household data collected for a larger study.

Materials and Methods

One hundred fifty four sample households were randomly selected from different size group of farms from a cluster of six villages in Jodhpur tehsil, district Jodhpur. Accordingly, farm size upto 3.5, 3.6 to 7, 7.1 to 10 ha and above 10 ha have been classified under marginal, small, medium and large size groups, (IRD, Government of Rajasthan) respectively. The farm production and household consumption data were collected from individual heads of households by recall memory method for the crop year 1989-90. The consumption data of individual items of food was recorded, according to the normal frequency of obtaining the individual items of food. For instance, cereals, which are nor-

mally home grown, is reorded on the basis of monthly consuption, where as milk consumption on daily basis. Special care has been taken to record changes and variations in individual items of consumption of each one of the items. The prices of consumer items as reproted by respondents were corss checked by the rates in the market for the corresponding periods. It was noted that the rates reproted were usually below the market rates, particularly in items like bajra and milk which were home produced.

The physical quantities of individual items were converted to calories for comparison. The members of the households were converted in to adult units/consumer units (CU) so as to estimate the calorie requirement and supply of food items, by following the standards adopted by national samples survey (NSS). A minimum of 2800 calories per consumer unit per day (Sukhatme 1968) was taken to be the requirement.

Results and Discussion

Consumer expenditure : The all India poverty line (rural) annual expenditure per family of 5.5 persons at 1977-78 prices was estimated at Rs. 6840/- in 1984-85, corresponding to Rs. 7980/- on the basis of consumer unit at 1977-78 prices, (Desai 1988). In Table 1, the annual consumer expenditure on

Table 1 Consumer expenditure of farm families in 1989-90

Size group	Average family size in consumer units	Annual consumer expenditure per household (Rs.)	Annual consumer expenditure per consumer unit (Rs.)	Consumer expenditure per month/consumer unit (Rs.)
Marginal (49)	6.15	7594	1234	102.8
Small (37)	5.72	7381	1291	107.5
Medium (40)	7.07	9032	1277	106.4
Large (28)	8.70	11024	1207	105.5
Average (154)	6.75	8498	1259	104.9

Figures in parantheses indicate the number of households

food in the sample households in arid Rajasthan are presented for the year 1989-90. The average consumer expenditure at current prices with an average family size of 6.75 consumer unit stood at

Rs. 8498/-. Thus the expenditure per consumer unit per month works out to Rs. 105/- at current prices. The consumer price index number of Agril. labourers in Rajasthan has risen from 326 in 1977-78 to 777 in 1989-90 (Labour Bureau 1990) showing an increase of 138 per cent in cost of living index for the agricultural labourers. On the basis of costs of living index, the poverty line expenditure per consumer unit per month should at least be Rs. 131/- at current prices instead of Rs. 105/-. The all India poverty line expenditure estimated for 1983 was Rs. 76.60 (Dev 1988). The results indicate that although the per capita expenditure on food has increased over the years, the increase has not been commensurate with the inflation in the country.

Consumption and poverty : However, as the present study is limited to cultivating households, any broad conclusion on poverty line expenditure should follow the physical quantities of various foods consumed and the corresponding expenditure at farm levels. The annual consumption of various food items per consumer unit and their values presented in Table 2 reveals that the annual expenditure varied between Rs. 1233/- on marginal farms to 1291/- on small farms and an average Rs. 1258/- for all size of farms. Further, irrespective of size of farms, the expenditure on cereals and milk jointly

Table 2 Annual consumption expenditure per consumer unit on different items of food

Items/ size group	Marginal		Small		Medium		Large		Average	
	Q	V	Q	V	Q	V	Q	V	Q	V
Cereals	217.1	457.9 (38)	233.7	496.0 (38)	223.0	524.7 (41)	243.7	544.1 (43)	222.9	497.2 (40)
Pulses	9.4	64.4 (5)	10.1	69.9 (5)	10.0	68.8 (5)	7.7	53.7 (4)	9.3	64.2 (5)
Sugar	14.5	116.3 (9)	12.8	104.8 (8)	14.2	112.9 (9)	13.8	110.2 (9)	14.0	112.3 (9)
Vegetable	39.0	78.0 (6)	36.0	72.9 (6)	33.0	66.2 (5)	33.0	65.2 (5)	35.4	70.7 (5)
Oil & fats	3.6	98.1 (8)	3.3	93.0 (7)	3.2	88.3 (7)	3.2	89.9 (7)	3.3	92.3 (7)
Milk*	126.2	371.0 (30)	135.3	403.1 (32)	130.9	374.7 (29)	122.0	357.3 (28)	128.5	375.3 (30)
Spices	—	47.8 (4)	—	51.6 (4)	—	41.5 (4)	—	45.8 (4)	—	46.4 (4)
Total		1233.5 (100)		1291.6 (100)		1277.1 (100)		1266.2 (100)		1258.4 (100)

Note : Figures in parentheses are percentage to total * Includes Ghee converted to milk equivalent.

Q — Quantity in kg

V — Value in Rupee

Table 3 Consumption of food, calories and protein per consumer unit per day in arid zone of Rajasthan

Items/ size group	Marginal			Small			Medium			Large			Average		
	Q	C	P	Q	C	P	Q	C	P	Q	C	P	Q	C	P
Cereals	594	2079	49	612	2142	50	610	2135	50	667	2334	55	610	2135	50
Pulses	25	83	05	27	89	06	27	89	06	21	69	04	25	83	05
Sugar	39	137	0.4	35	123	0.3	38	133	0.4	37	130	0.3	38	133	0.4
Vegetable	106	42	1.2	98	39	1.1	90	36	1.0	90	36	1.0	96	38	1.1
Oil & fats	10	88	—	09	79	—	09	79	—	09	79	—	09	79	—
Milk	345	276	12.7	370	296	13.6	358	286	13.2	334	267	12.3	352	282	12.9
Total	1119	2705	68.3	1151	2768	71.0	1132	2758	70.6	1158	2915	72.6	1130	2750	69.4

Q — Quantity in gram

P — Protein in gram

C — Calories

accounted for more than 65 % of total expenditure on food. The lower than minimum required expenditure, noted earlier, may be due to the large proportion of home grown cereal and milk, constituting the consumption basket of cultivator households, the prices of which tended to be quoted at the prevailing farm gate price as opposed to market prices which will include the transportation and other marketing costs. Shah (1980) has estimated the poverty line expenditure in rural areas at less than half of that in urban areas. Therefore for cultivating households at least, less than the minimum expenditure on food, need not necessarily reflect the poverty status or otherwise of the households.

The poverty line is based essentially on calorie intake. The food intake in terms of calorie intake and the proteins contained therein per consumer unit per day are presented in Table 3. The average calories for all households stood at 2750 calories with a protein content of 69.4, both of which are

nearer the recommended level of 2800 calories and 70g of protein per consumer unit per day. Among the different size groups, the calorie intake varied between 2705 in marginal farms to 2915 on large farms. Therefore, purely in terms of calories, only large farm households were found to attain a level of consumption above the poverty line.

The results further indicate that an overwhelming proportion of cultivating households in arid Rajasthan are below the poverty line calorie intake. However, most of them are at the margin. A cursory look at the items of food consumed reveals that cereals and milk constitute the core. All the remaining items of food intake was less than the recommended dosage, leading perhaps to disproportionate intake of essential protein and minerals, which a balanced food should contain.

The dichotomy of lower consumption expenditure than that warranted by rate of inflation and lesser calorie intake despite low cost of calories eludes explanation on the face of it. However a look at the per capita production (availability) of the staple cereal bajra on different size of farms (Table 4) reveals that on farm availability of bajra (net of seed, feed and wastage) irrespective of size of farms, was less than 50% of requirement, the availability going down as the size of farms decreased. The inference therefore, is that deficient supply of cereals from ones own farm has constrained the supply of required calories owing probably to lack of effective demand, (Kumar 1990).

Table 4 Sources of cereal supply on the sample farms 1989-90

Size group	(Kg CU ⁻¹ annum ⁻¹)		Total cereals
	Produced* bajra	Purchased cereals	
Marginal	75.3	130.0	205.3
Small	125.2	129.0	254.2
Medium	150.3	49.0	199.3
Large	167.0	88.0	255.0

CU Consumer Unit

* Net of seed, feed and wastage.

Policy implication : The analysis indicate that for cultivating households the poverty line has got to be in terms of calorie intake because the expenditure norm may give a wrong signal owing to a overwhelming contribution of farm produced cereals. For the same reason, use of consumer price index (CPI) of Agriculture labours may have to be used cautiously for deflating current consumer expenditure.

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The dichotomy of lower consumption expenditure than that warranted by rate of inflation and lesser calorie intake despite low cost of calories eludes explanation on the face of it. However a look at the per capita production (availability) of the staple cereal patta on different size of farms (Table 4) reveals that on farm availability of patta (net of seed, feed and wastage) irrespective of size of farms was less than 20% of requirement. The availability going down as the size of farms decreased. The inference therefore is that deficient supply of cereals from own own farms constrained the supply of required calories, probably to lack of effective demand (Kumar 1990).

accounted for more than 65% of total expenditure on food. The lower than minimum required expenditure noted earlier may be due to the large proportion of home grown cereals. In effect, substituting the consumption basket of cultivator households, the prices of which tended to be depressed at the prevailing farm gate price as opposed to market prices which will include the transportation and other marketing costs. Shan (1980) has estimated the poverty line expenditure in rural areas is less than half of that in urban areas. Therefore for cultivating households, at least, less than the minimum expenditure on food, need not necessarily reflect the poverty status or otherwise of the households.

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Total			

* Net of seed, feed and wastage
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