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Appropriate Criteria for the Measurement of Levels of Living

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I. INTRODUCTION

The economic welfare of an individual is generally taken to be a function of his consumption, which in turn, is a function of his income. His actual welfare is derived from the quantities of each good consumed, relative to his needs. e.g. a growing teenager needs more food than an adult while a small child needs less. Hence, the same quantity of food consumed will produce a different welfare level in each.

Although the ideal procedure would be to measure the consumption of each individual and assess his welfare, we can obtain meaningful economic data only at *household* level since most consumption decisions are made by heads of households. This necessitates the consideration of how best to characterise a household's consumption and its welfare level. In any such characterization, certain adjustments will have to be made for drawing inter-personal comparisons.

There can be different approaches to this problem and we shall consider the following three:

(i) To develop commodity-specific equivalence scales as well as an income scale to account for household size and age-sex composition; and then deflate total household consumption expenditure by the number of equivalent consumption units in the household [Prais and Houthakker (1955), Barten (1964), Muellbauer (1974), Rothbarth (1943), Roy and Dhar (1959), Singh and Nagar (1973), Kakwani (1977), etc.].

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(ii) To consider the Engel ratios or budget shares of selected commodities, such as food, as welfare indicators [Engel (1895), Deaton (1980), Iyengar and Jain (1973), Rao (1981), etc.].

(iii) To use quantity-based measures of consumption, where the equivalent scales for household consumption etc., are exogenously determined. Obviously, such a procedure has limited applications. For example, in the case of food the equivalent scales are determined on biological considerations [National Sample Survey (1976), Gopalan *et al.* (1971), Food and Agricultural Organisation (1973), etc.].

In a developing country, where food dominates household budgets and where incomes are low and unequal, there will be a large section of the population whose food needs are not being adequately met. In this context, approach (iii) appears more relevant.

In this study, we introduce a further refinement to approach (iii) by suggesting the inclusion of household occupation in the calculation of equivalent units.

We also consider other commonly used welfare indicators and compare the rankings obtained by using each on the same set of data, on the assumption that the different indicators should lead to the same ranking of households.

In Section II, we define the welfare indicators chosen for comparison. Section III defines the data and methodology. Section IV presents the main results and Section V summarises.

II. DEFINITIONS

Let the consumption vector of the household be

$$q = [q_1 \ldots q_n] \tag{1}$$

were the q's are the quantities of various goods consumed. This vector can be partitioned into sub-vectors of cereals, other foods and non-food items, i.e.

$$q = [q_c \mid q_{of} \mid q_{nf}] \tag{2}$$

Correspondingly, the price vector

$$p = [p_1 \ldots p_n]$$

can also be partitioned into

$$p = [p_c \mid p_{of} \mid p_{nf}] \tag{2a}$$

Obviously, total consumption expenditure

$$E = \sum_{i=1}^{n} p_i q_i \tag{3}$$

can also be broken up into three components in correspondence, i.e.

$$E = E_c + E_{of} + E_{nf} \tag{3a}$$

where $E_c = p_c' \cdot q_c$

$E_{of} = p_{of}' \cdot q_{of}$

$E_{nf} = p_{nf}' \cdot q_{nf}$

Let household members be classified as per their age-sex and occupation so that household size

$$n = \sum_k \sum_g n_{kg} \tag{4}$$

where k indexes the occupation and g, the age and sex groups; n_{kg} denotes the number in each cell. Traditionally, occupation classes are not taken into account and n is taken as

$$n = \sum_g n_g$$

If c is the vector of calorie content per unit weight of each item consumed, we have

$$c = [c_1 \ldots c_n] \tag{5}$$

where the non-food c's are zero and the c's corresponding to food items are positive.

Total calorie consumption (CAL) of the household is

$$CAL = c' \cdot q = \sum_{i=1} c_i q_i \tag{6}$$

Equivalent calorie consumption units are calculated as

$$u = \sum_k \sum_g u_{kg} n_{kg} \tag{7}$$

where the coefficients u_{kg} are fixed on purely biological grounds. The occupations are classified according to the energy output required as sedentary, moderate and heavy occupations (so that $k = 1, \ldots, 3$). The sedentary male adult is the *numeraire* and other household members are expressed as equivalent sedentary male adults.

There is clearcut and overwhelming evidence to show that occupation

is an important index of an individual's calorie requirement, and traditionally, this is accounted for by making adjustments in the norm fixed for each data set.

We propose a direct and effective way to account for occupation at the household level itself so that a single norm is applicable for all data sets regardless of sector or region, and all households regardless of their characteristics.

Our indicator is the per unit daily calorie intake of the household,

$$PUCAL = \frac{CAL}{u} = \frac{\sum_i c_i q_i}{\sum_k \sum_g u_{kg} n_{kg}} \tag{8}$$

If household consumption is recorded other than daily (as happens in NSS, which uses a reference period of 30 days), then appropriate adjustments have to be made.

We can see that the *PUCAL* is a need-based indicator of food consumption and hence particularly relevant in the Indian context. As it is quantity-based, it is not affected by price changes and can be directly used for intertemporal and inter-sectoral comparisons.

The other welfare indicators considered by us are

(i) the per capita expenditure, or

$$PCE = \frac{E}{n} \tag{9}$$

which is traditionally used, in spite of limitations due to its dependence on the prevailing prices and the equal weightage given to all household members.

(ii) The share of food in total expenditure, or

$$FS = \frac{E_c + E_{of}}{E} \tag{10}$$

which is an inverse indicator of household welfare as pointed out by Engel (1895) who noted that the *FS* was lower for larger vis-a-vis small households at the same per capita expenditure level, as well as lower for households of the same composition at a higher expenditure level.

(iii) The share of cereals in total expenditure or

$$CS = \frac{E_c}{E} \tag{11}$$

another inverse indicator of household welfare used by Iyengar and Jain (1973).

One can see that *PUCAL*, *FS* and *CS* are all suitable for intertemporal and spatial comparisons. Further, all these three indicators are functions of expenditure. *PUCAL*, which can be written slightly differently as

$$PUCAL = \frac{1}{u} \sum_{i=1}^{n} \frac{c_i}{p_i} (p_i q_i),$$

is also a function of total expenditure. This leads us to suppose that all these indicators would give similar rankings of sample households. If this hypothesis is actually borne out, we will have four alternative indicators to use. Otherwise, we are left with the question of which is the most appropriate criterion to use for measurement of welfare levels.

III. Data and Methodology

This study is based on unaggregated consumption expenditure data collected in the 28th Round of the National Sample Survey (NSS) for the State of Karnataka. In this survey, which covered the period October 1973-June 1974, a stratified two-stage *PPS* sampling design was adopted. The first stage unit in the urban section was the urban block, while in the rural sector, the village formed the first stage unit. In both cases the household was the ultimate unit of observation. The expenditure on various items pertains to the expenditure incurred by the household over a period of 30 days preceding the date of survey, (For details, refer NSSO Report No. 240.)

The sample design was such that the sample is self-weighting upto the state level. 620 rural households and 369 urban households were surveyed in Karnataka. Further, the use of interpenetrating subsamples canvassed at different points of time in the survey period, is designed to eliminate the seasonal effects.

Information available on each household was as below :

1. Quantity of and expenditure on all items of consumption for the last 30 days.
2. Number of adults (male and female) and children in the household.
3. Occupation, religion, land owned and social status of household.

From this, the *PCE* (monthly), Cereal share (*CS*), Food share (*FS*) and per unit daily calorie intake (*PUCAL*) were calculated for each household.

The calculation of *CS*, *FS* and *PCE* are self-evident. *CS* is the ratio of expenditure on Cereals to total consumption expenditure and *FS* is the ratio of expenditure on Food to total consumption expenditure. 'Food' excludes Pan, Tobacco and Liquor.

The calculation of *PUCAL* was as follows: The total calories and proteins consumed per day by the household was calculated by dividing all the quantities of food items consumed by 30, and then multiplying them by their calorie content as per the 'Nutritive Value of Indian Foods' (C. Gopalan, BV Rama Sastry and SC Balasubramaniam (1971). Items which were not recorded by weight (or could not be converted easily into Kgs); composite items (e.g. 'other vegetables'); low calorie items like tea, coffee, spices; and cooked items like Sweets, Confectionaries, Cooked meals, etc., were left out of this calculation. The notable exceptions were 'Fresh fish' and 'Dry fish' where the average of the calorie and portein values of some 35 varieties of fresh and dry fish which are consumed in Karnataka were used. This is because fish is an important component of diet in coastal Karnataka and cannot be left out. Calories are measured in kilo calories (K. Cals).

From a comparison of this methodology with that of the NSS (NSSO Report No. 238 (1976)), we note that the excluded items belong entirely to Group V, which contributes about 3.53% of the calories in rural areas and 6.9% of the calories in urban areas (NSS (1976) Vol. 1, p. 141 and Vol. 2, p. 64).

Consumption units for calories were calculated as follows: The households were first divided into sedentary, moderate and heavy worker households according to their occupation. The National Classification of Occupations (1968) was used for this purpose.* Then for each household, the numbers of men, women and children were reduced to consumption units using the scales suggested by Gopalan *et al* (1971, p. 10). Since we did not have the age-wise breakup of the children, an average scale was used for children.** The scales used are given in Table 1.

It must be emphasised that these scales are meant only for calories and not other items. It was noticed from the table of daily allowances recommended by the Nutrition Expert Group in 1968 (Gopalan *et al.* (1971), p. 27) that the activity level does not affect protein requirements, and that the average requirements for women and children were 0.8 and 0.67

*The implicit assumption here is that all adult members of a household have the same activity level. Although this may not be true, it has been observed that the eating patterns of the members of a household generally follow that of the principal earners.

**Those below 15 years of age are defined as 'Children' by the NSS.

TABLE 1
CONVERSION SCALE FOR CALCULATION OF CONSUMPTION UNITS FOR CALORIES

	Activity Level		
	Sedentary	*Moderate*	*Heavy*
Adult male	1.0	1.2	1.6
Adult female	0.8	0.9	1.2
Children	0.67	0.67	0.67

that of men respectively. Hence, consumption units for protein intake were calculated using the following scales:

Adult male . . . 1.00
Adult female . . . 0.80
Child . . . 0.67

Finally, the calorie intake per consumption unit (*PUCAL*) was calculated for each household as also the protein intake per consumption unit and the consumption expenditure per unit (*PUE*). Although it is not appropriate to use calorie units to calculate per unit expenditure, this exercise was carried out to illustrate a few points.

The consumption unit scales for calories used by *NSS* (1976) are similar to the protein scales we have used. The NSS used the full age distribution in the household, and we were unable to exactly duplicate their procedure for lack of age-data. However, in order to illustrate the distortions occurring due to the exclusion of information on occupation we also calculated the per unit calorie intake for each household using the protein scales (*PUCAL**). Two-way tables of *PUCAL* and (*PUCAL**) have been prepared to show the extent of misclassification that occurs (Tables 2*a* and 2*b*).

In order to judge the association between the main variables in terms of their rankings, households were ranked according to ascending *PCE* and *PUE*, descending *FS* and *CS*, and ascending *PUCAL*. Each time, a rank was given to each household, so that finally, we had obtained five ranks for each household. Then the rankings were compared pairwise by calculating the Spearman's Rank Correlation Coefficient between each pair of rankings:*

$$r_s = \frac{6 \sum_{i=1}^{n} d_i^2}{n^3 - n}$$

*Since actual values are available, a product moment correlation coefficient could also be calculated. However, data errors and the lack of linearity in the relationship between the variables precluded its use in this context.

where d_i = the difference between the two ranks; n = Number of households.

These coefficients were calculated between *CS* and *PCE*, *FS* and *PCE*, *FS* and *PUCAL*, *CS* and *PUCAL*, *PCE* and *PUCAL*, *PUE* and *CS*, and *PUE* and *FS*.

Two-way classificatory tables were also prepared for the Rural and Urban samples using

(i) *PCE* and *CS* (iii) *PCE* and *PUCAL* (v) *FS* and *PUCAL*
(ii) *PCE* and *FS* (iv) *PUCAL* and *PUCAL** (vi) *CS* and *PUCAL*

The estimates of the extent of poverty according to different criteria were made using *PCE*, *CS*, *FS* and *PUCAL* distributions. The cutoff point for *PCE* below which the household may be regarded as 'poor' was fixed at Rs 52.72 for rural areas and Rs 65.00 for urban areas. These are the figures used by Rao (1982) for the 1973-74 All-India Poverty Line. He obtained them by using "appropriate cost of living indices to update the poverty line as defined by the Experts Group for 1961-62, which was accepted by the Planning Commission."

The cut-off point for *CS* was 30 per cent as suggested by Iyengar and Jain (1973). It is interesting to note that this broadly corresponds with the poverty line described in the previous paragraph. From Table 9*a*, we see that the majority of the rural households in the Rs 43.55 expenditure class (109 out of 116) and those in the classes below, all have cereal shares of 30 per cent and above. Similarly, we find that in the urban sample, the majority of the households with *PCE* below Rs 75 have a cereal share of 30 per cent and above.

The cut-off point for *FS* was fixed at 50 per cent after studying the joint distribution of *FS* and *PCE* in both the samples and noticing a pattern similar to that for *CS* and *PCE*.

In determining the extent of poverty on the nutritional scale, we took the minimum requirement of 2400 K cals per consumption unit recommended by the Nutrition Expert Group (Gopalan *et al.* (1971), p. 27) and reduced it by 100 K cals, to compensate for any underestimation over and above that due to the exclusion of Group V items (this had already been compensated for using the NSS 26th Round estimates (NSS (1976)). Thus, we had a cut-off point at 2300 K cals which also happens to coincide with the *FAO* recommendation (*FAO* (1973)) endorsed by Sukhatme (1977). Since our indicator is an average over 30 days consumption of all the household members, we feel that the intra-individual variation is already accounted for, while the interindividual differences are taken into account in the consumption unit calculation.

It is necessary to clarify here that our *PUCAL* measure only reflects

the actual consumption of calories relative to the needs of the households (as expressed in the calculation of the consumption units). One cannot use this measure to identify under-nourished households or individuals. We can only use it to identify *possibly* inadequately-nourished and hence 'poor' households.

IV. Results

The overall averages obtained for the two samples are given below:

Table 2

	Rural	*Urban*
Number of households sampled	620	369
persons	3484	1959
Average household size	5.62	5.31
per capita consumption expenditure (Rs)	52.28	66.46
cereal share (*CS*)	0.4770	0.3216
food share (*FS*)	0.7632	0.7079
difference between *FS* and *CS*	0.2228	0.3971
per unit calorie intake (K. cal)	2108.65	1862.33
per unit calorie intake (NSS type) (K. Cal)	2495.82	2141.98
per unit protein intake (mg)	66.43	55.56
No. of calorie consumption units	5.33	4.94
No. of protein consumption units	4.50	4.29

All average figures are per household. The two-way classificatory tables and the distributions of the samples according to *PCE*, *FS*, *CS* and *PUCAL* can be found in the appendix (Tables 5 to 14). In Tables 6*a* and 6*b*, the distribution of *FS* vs *PCE* shows a generally inverse pattern, while in Tables 5*a* and 5*b* the relationship between *PCE* and *CS* is more diffused. However, in both cases one notes the wide range of food shares and cereal shares that can exist in each *PCE* group and vice versa. Obviously, the relationship is not straight-forwardly linear. It is possible that a logarithmic transformation of *PCE* would remove some of the non-linearity. This is also true of the relationship between *PCE* and *PUCAL* in Tables 7*a* and 7*b*.

Although these tables indicate a strong positive relationship between *PCE* and *PUCAL* we note that there is quite a bit of diffusion especially in the upper expenditure groups. This is quite in accordance with the hypothesis that the exclusive linear relationship between *PUCAL* and *PCE* probably exists only until the deprivation of a household is overcome, and thereafter gets diffused. Since our main interest lies in the study of the lower expenditure groups and identification of the really poor households in this set, there is justification in using *PUCAL* as our classificatory criterion.

Interestingly, the Spearman's Rank Correlations (Table 5) show us that, between *CS* and *FS*, it is the *CS* that has a ranking order closer to that of *PCE*. However, both *CS* and *FS* rankings do not show a very high degree of correspondence with *PCE* rankings. We also see that the adjustment for the household composition made in *PUE* only marginally improves its rank correlation with *FS* and *CS*. As for their relationship with the *PUCAL* rankings, there is almost none (the values for r_s being insignificant).

TABLE 3
SPEARMAN'S RANK CORRELATIONS

Variables	*Rural*	*Urban*
PCE and *CS*	0.441634*	0.683116*
PCE and *FS*	0.329677*	0.41167*
PCE and *PUCAL*	0.674375*	0.529274*
PUCAL and *CS*	0.015098	0.055616
PUCAL and *FS*	0.007678	0.002926
PUCAL and *PUE*	0.725416*	0.599979*
PUE and *FS*	0.323130*	0.399852*
PUE and *CS*	0.451101*	0.677306*

*Significant at 5 per cent level of significance.

NOTE : The value of r_s should lie between —1 and +1. Values close to the boundaries indicate significant correlation, while values in the neighbourhood of 0 indicate lack of correlation. A simple *t*-test is used to test for significance.

It would be worthwhile here to look at the consequences of excluding occupation on the calculation of calorie consumption units.

From Tables 8*a* and 8*b*, we see that the *PUCAL** calculation leads to a misclassification upwards to the tune of 65.2 per cent (404 out of 620

households) in rural Karnataka, and 46.6 per cent (172 out of 369 households) in urban Karnataka.

The consequences for poverty identification are quite grave. The cut-off point used by the NSS (1976) for *PUCAL** is 2700 K cals. Taking this without comment, and using 2300 K cals as the cut-off point for *PUCAL*, we give below the percentage of households misclassified as poor or non-poor by *PUCAL**.

	Rural		*Urban*	
	Number of households	*Percentage*	*Number of households*	*Percentage*
Households classified as non-poor as per PUCAL* and poor as per PUCAL	21	3.4	17	4.6
Households classified as poor as per PUCAL* and non-poor as per PUCAL	34	5.5	38	10.3

The overall poverty estimate as per *PUCAL** is a little higher (64.8 per cent Rural and 71.8 per cent urban) than the corresponding estimates for *PUCAL*; but more important is the fact that many non-poor households are getting classified as poor and vice versa because of the exclusion of information on occupation.

The per unit calorie intake (*PUCAL*) is, perhaps, the most discriminating indicator of poverty in its most basic form. It gives us an estimate of the relative nutritional status of a household that is very close to reality, since we have taken into account variations due to sex, occupation and physical growth needs. Ideally of course, the age differences should also have been accounted for, but as mentioned earlier, this was not possible for this data set. As such, it is logical to compare other ways of ranking households with the *PUCAL* rankings.

We see from Table 3 that the *PUCAL* rankings relate best with those of *PUE* and *PCE* while the *CS* and *FS* rankings do not reflect the *PUCAL* rankings at all.

Table 4 gives us the various estimates of the extent of poverty that we obtained. Of course, these estimates depend on the cut-off points used, and these are after all fixed with a certain amount of subjectivity. However, we have tried to keep some measure of correspondence between the cut-off points for different indicators to facilitate comparison.

We note that the poverty estimates from *PUCAL* and *PCE* are fairly close, although completely different criteria were used. This lends support to the well-known contention that it is the purchasing power that plays the dominant role in determining the level of nutrition of a household.

The poverty estimates using *CS* and *FS* are much higher than those

TABLE 4
EXTENT OF POVERTY ACCORDING TO DIFFERENT CRITERIA—KARNATAKA (1973-74)

Classifying Variable	Rural		Urban	
	Percentage of		Percentage of	
	Households	People	Households	People
PCE (below Rs 52.72 for rural and below Rs 65/-for urban area)	58.55	63.69	52.28	61.82
Average per unit Calories/ day below 2300 K. cals	62.27	62.17	66.13	72.14
Cereal Share				
(i) Above 30 per cent	89.52	90.99	62.34	71.77
(ii) Above 60 per cent	28.71	29.91	5.15	5.00
Food Share				
(i) Above 50 per cent	96.45	96.81	93.22	93.06
(ii) Above 80 per cent	55.16	56.57	35.23	35.02

using *PCE* and *PUCAL*. From the joint distribution tables we see that this is due to the fact that there are many households who have *PCE* above the poverty line but also a *CS* or an *FS* that are high. We also see that the *PUCAL* distribution of households having a high *CS* and *FS* is quite wide and hence it is possible that using *PUCAL*, we can distinguish two levels of poverty in the high *FS*(*CS*) group. One group whose food needs are fully satisfied (i.e. *PUCAL* above 2300 K. cals) and the other whose food needs are not fully satisfied (*PUCAL* below 2300 K. cals). The behaviour of these two types of households will be different as they acquire increased purchasing power. The first group will start exhibiting lower *FS* and generally show signs of prosperity, while the second group will continue to show a high *FS* until the *PUCAL* level rises above the threshold and only then will the *FS* begin to drop. Thus, two different levels of poverty get confounded when *FS* is used as the indicator, which shows that it is not very sensitive at the lower end.

The deepest poverty levels are defined by the *CS* being above 60 per cent or the *FS* being above 80 per cent. These groups seem to be much larger in the rural areas. This is in contrast to the fact that the extent of nutritional poverty seems to be greater in urban areas. An explanation could lie in the different compositions of the diet in rural and urban areas. Although the coarser (cheaper) varieties of grain are used, they do not nutritionally affect the households. Another explanation could be that urban households being mainly sedentary, food is not as important in the budgeting process as in rural areas, and hence the non-food expenditure

begins to grow even at low *PUCAL* levels.

V. Conclusions

As outlined in the introduction, the purpose of this study is to try and determine the adequacy of various indicators for the measurement and comparison of levels of living. The ideal indicator that is free from all problems of comparability would be one that is based on the physical quantities of all goods consumed and adjusted exactly for household needs. However, such an indicator has yet to be developed in the context of the data available and the problems of aggregation that occur.

Mahalanobis' comparison of the distributions of the total quantity of cereals consumed per household in different expenditure classes (Mahalanobis (1958) is a step in this direction, although strictly speaking, this method is not free of prices.

The closest that we have come to the ideal procedure is in the calculation of *PUCAL* and average per unit daily consumption of protein. Even here, as we have seen, the calculation of consumption units, and the composite nature of some foodstuffs necessarily results in some loss of precision. We have seen that the *PCE* rankings are fairly close to those of *PUCAL*; while *FS* and *CS* do seem to confound two levels of poverty. Thus, *PUCAL* would appear to be the most discriminating indicator to use for comparison purposes in the context of our data.

We also note that as a measure of overall standard of living, *PUCAL* is not by itself entirely suitable, in that it relates only to food consumption. Expenditure is the only composite measure or total consumption that we have, and here, our results show that making suitable adjustments for household size, composition and occupation greatly improves the efficacy of the expenditure indicator. The *PUE* used in our calculation uses adjustment coefficients that are, strictly speaking, suitable only for calorie consumption. Even this inappropriate adjustment seems to improve the picture.

Hence, we conclude that adjusted consumption expenditure which reflects the nutritional level of a household and also accounts for its size, composition and occupation, would be a very effective indicator of the true levels of living in a community.

For purposes of inter-sectoral and inter-temporal comparison, especially at the lower end of the distribution, the *PUCAL* is the most discriminating indicator.

However, this study is at present limited to only two data sets and it is possible that some of these results may be specific to this region. General conclusions may not be warranted until these exercises have been repeated with other data sets.

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Appendix

Contents

TABLE 5a

DISTRIBUTION OF HOUSEHOLDS BY PER CAPITA MONTHLY EXPENDITURE (*PCE*) AND CEREAL SHARE (*CS*)—KARNATAKA RURAL SAMPLE— NSS 28TH ROUND—1973/74

CS% / *PCE* (*Rs.*)	*100-99*	*90-80*	*80-70*	*70-60*	*60-50*	*50-40*	*40-30*	*30-20*	*20-10*	*Below 10*	*Total*
0-13					1 (3.00)						1 (3.00)
13-15				2 (8.00)	1 (7.00)						3 (7.67)
15-18			1 (4.00)		2 (10.00)						3 (8.00)
18-21		1 (4.00)	2 (6.00)	5 (8.60)	2 (6.00)						10 (7.10)
21-24		1 (5.00)	6 (6.67)	9 (6.00)	6 (8.83)						22 (6.77)
24-28			6 (6.67)	8 (6.50)	13 (6.62)	6 (5.33)	2 (9.00)				35 (6.51)
28-34			14 (5.93)	24 (6.04)	21 (6.76)	20 (5.15)	5 (4.60)			1 (1.00)	85 (5.85)
34-43			6 (5.50)	29 (5.34)	45 (5.89)	27 (6.85)	4 (4.50)	3 (10.33)			114 ((6.03)

43-55		5 (8.60)	17 (5.53)	39 (6.10)	27 (5.74)	19 (5.89)	6 (4.50)	2 (5.00)	1 (1.00)	116 (5.86)
55-75		3 (9.00)	31 (5.26)	23 (4.26)	31 (5.29)	18 (4.11)	10 (5.70)	2 (7.00)	2 (2.00)	120 (5.01)
75-100		3 (4.33)	3 (5.00)	14 (5.64)	17 (6.41)	8 (5.25)	8 (5.25)	1 (8.00)	2 (1.00)	56 (5.54)
100-150		1 (2.00)	1 (2.00)	4 (1.50)	7 (3,43)	7 (2.71)	7 (6.57)	5 (4.80)	3 (3.00)	35 (3.77)
150-200				2 (2.00)	1 (4.00)	4 (5.50)	4 (4.00)	5 (4.00)	1 (2.00)	15 (4.00)
200+					1 (11.00)		1 (5.00)	2 (1.00)	1 (1.00)	5 (3.80)
TOTAL	2 (4.15)	47 (6.26)	129 (5.73)	17 (5.81)	139 (5.81)	67 (4.90)	37 (5.84)	17 (4.59)	11 (1.82)	620 (5.62)

(Figures in brackets indicate average household size).

TABLE 5*b*

DISTRIBUTION OF HOUSEHOLDS BY PER CAPITA MONTHLY EXPENDITURE (*PCE*) AND CEREAL SHARE (*CS*)—KARNATAKA URBAN SAMPLE—NSS 28TH ROUND—1973-74

CS% / *PCE (Rs.)*	*100-90*	*90-80*	*80-70*	*70-60*	*60-50*	*50-40*	*40-30*	*30-20*	*20-10*	*Below 10*	*Total*
0-13											
13-15											
15-18						1 (8.00)					1 (8.00)
18-21				1 (5.00)	1 (4.00)						2 (4.50)
21-24				1 (11.00)		1 (3.00)	1 (12.00)				3 (8.67)
24-28				1 (4.00)	9 (7.33)		1 (9.00)				11 (7.18)
28-34				5 (6.00)	6 (8.35)	7 (5.14)	4 (6.50)	1 (10.00)			23 (6.61)
34-43				4 (4.00)	15 (7.93)	19 (6.42)	10 (6.9)	4 (6.25)		1 (2.00)	53 (6.67)
43-55			1 (4.00)	1 (10.00)	8 (6.38)	16 (6.31)	14 (5.71)	9 (6.89)	2 (5.50)		51 (6.25)

55-75	1 (4.00)	2 (3.50)	7 (5.14)	23 (5.3)	32 (6.81)	14 (5.64)	6 (5.33)	2 (1.00)	90 (5.61)
75-100		1 (5.00)	1 (3.25)	9 (6.11)	17 (5.00)	14 (5.36)	1 (7.00)	7 (1.00)	53 (4.67)
100-150	(2.00)			1 (6.00)	2 (4.00)	15 (5.20)	9 (5.56)	20 (1.35)	48 (3.48)
150-200					2 (5.00)	3 (2.67)	6 (3.83)	9 (1.89)	20 (2.90)
200 +					1 (1.00)	3 (3.00)	2 (3.00)	8 (2.50)	14 (2.57)
TOTAL	3 (3.33)	16 (5.50)	50 (6.78)	77 (5.91)	84 (6.12)	63 (5.49)	26 (4.96)	50 (1.56)	369 (5.31)

(Figures i brackets indicate average household size).

TABLE 6a

DISTRIBUTION OF HOUSEHOLDS BY PER CAPITA MONTHLY CONSUMPTION EXPENDITURE (*PCE*) AND FOOD SHARE (*FS*) RURAL KARNATAKA SAMPLE—N S S 28TH ROUND 1973-74

FS% / *PCE (Rs)*	*90-100*	*80-90*	*70-80*	*60-70*	*50-60*	*40-50*	*30-40*	*20-30*	*10-20*	*Below 10*	*Total*
0-13				1 (3.0)							1 (3.00)
13-15		3 (7.67)									3 (7.67)
15-18		2 (10.00)	1 (4.0)								3 (8.00)
18-21	2 (5.0)	6 (7.50)	2 (8.00)								10 (7.10)
21-24	2 (6.5)	18 (7.06)	2 (4.50)								22 (6.77)
24-28	5 (7.0)	18 (6.06)	9 (7.44)	2 (4.00)	1 (9.00)						35 (6.51)
28-34	8 (7.88)	46 (5.93)	23 (5.26)	6 (4.83)	2 (5.00)						85 (5.85)
34-43	16 (7.19)	62 (5.68)	29 (5.69)	4 (9.50)	1 (4.00)	1 (8.00)		1 (5.00)			114 (6.03)

43-55	13 (5.62)	54 (6.07)	28 (5.57)	15 (5.93)	6 (5.67)				116 (5.86)
55-75	9 (7.44)	50 (4.74)	36 (4.33)	10 (5.20)	12 (6.08)	2 (5.00)	1 (6.00)		120 (5.01)
75-100	6 (3.33)	10 (3.70)	20 (7.15)	12 (4.50)	7 (6.86)	1 (8.00)			56 (5.54)
100-150	3 (1.67)	7 (2.00)	5 (1.80)	5 (2.80)	10 (5.30)	1 (4.00)	4 (8.25)		35 (3.77)
150-200		2 (2.00)		2 (6.00)	3 (4.67)	3 (3.33)	5 (4.00)		15 (4.00)
200 +			1 (1.00)		1 (11.00)	1 (1.00)	2 (3.00)		5 (3.80)
TOTAL	64 (6.27)	276 (5.65)	156 (5.43)	57 (5.25)	43 (5.95)	9 (4.56)	12 (5.42)	1 (5.00)	620 (5.62)

(Figures in brackets indicate average household size)

TABLE 6*b*

DISTRIBUTION OF HOUSEHOLDS BY PER CAPITA MONTHLY EXPENDITURE (*PCE*) AND FOOD SHARE (*FS*)—KARNATAKA URBAN SAMPLE—NSS 28TH ROUND—1973-74

FS / *PCE* (*Rs*)	*100-90*	*90-80*	*80-70*	*70-60*	*60-50*	*50-40*	*40-30*	*30-20*	*20-10*	*Below 10*	*Total*
0-13											
13-15											
15-18		1 (8.00)									1 (8.90)
18-21	1 (5.00)	1 (4.00)									2 (4.50)
21-24		1 (11.00)	2 (7.50)								3 (8.67)
24-28		8 (7.38)	3 (6.67)								11 (7.18)
28-34		12 (6.58)	9 (6.44)	1 (5.00)		1 (10.00)					23 (6.61)
34-43	2 (3.00)	25 (6.88)	20 (7.05)	4 (5.25)	2 (6.50)						53 (6.66)
43-55	3 (7.33)	18 (6.56)	15 (5.60)	8 (6.38)	5 (7.20)	2 (4.00)					51 (6.25)

55-75	6 (1.66)	26 (5.38)	28 (5.56)	23 (6.78)	7 (7.00)			90 (5.61)
75-100	4 (1.00)	9 (3.22)	23 (5.52)	12 (5.17)	3 (5.67)	2 (4.00)		53 (4.66)
100-150	4 (1.00)	7 (1.86)	8 (1.25)	12 (3.83)	6 (3.83)	8 (5.00)	3 (10.33)	48 (3.48)
150-200		2 (1.00)	4 (1.25)	7 (3.57)	3 (1.00)	1 (6.00)	3 (5.67)	20 (2.90)
200 +			1 (1.00)	4 (1.25)	4 (3.50)	3 (3.00)	2 (5.50)	14 (2.57)
TOTAL	20 (2.55)	110 (5.77)	113 (5.41)	71 (5.23)	30 (5.17)	17 (4.76)	8 (6.88)	369 (5.31)

(Figures in brackets indicate average household size).

TABLE 7a

DISTRIBUTION OF HOUSEHOLDS BY PER CAPITA MONTHLY EXPENDITURE (*PGE*) AND CONSUMPTION OF CALORIES PER DIEM PER UNIT (*PUCAL*)—KARNATAKA RURAL SAMPLE—NSS 28TH ROUND—1973/74

PUCAL (*k.cals*) / *PCE* (*Rs.*)	*0-1500*	*1500-1700*	*1700-1900*	*1900-2100*	*2100-2300*	*2300-2700*	*2700-3000*	*3000-3500*	*3500-4000*	*Over 4000*	*Total*
0-13	1 (3.00)										1 (3.00)
13-15	3 (7.67)										3 (7.67)
15-18	3 (8.00)										3 (8.00)
18-21	10 (7.10)										10 (7.10)
21-24	12 (6.00)	7 (8.14)	1 (6.00)		2 (7.00)						22 (6.77)
24-28	16 (6.50)	9 (6.56)	6 (6.50)	3 (6.33)	1 (7.00)						35 (6.51)
28-34	36 (5.22)	15 (6.47)	8 (5.38)	9 (7.78)	10 (5.70)	5 (5.80)	1 (8.00)		1 (5.00)		85 (5.85)
34-43	22 (5.45)	15 (6.60)	26 (5.00)	11 (6.91)	18 (5.72)	16 (7.63)	3 (7.67)	1 (4.00)	2 (5.00)		114 (6.03)

43-55	15 (4.80)	11 (5.36)	15 (4.20)	18 (7.67)	15 (6.53)	23 (6.30)	8 (6.63)	11 (4.73)			116 (5.86)
55-75	6 (4.50)	5 (3.00)	9 (3.56)	17 (3.44)	17 (4.47)	29 (5.48)	12 (6.25)	20 (6.15)	9 (4.56)	4 (5.50)	120 (5.01)
75-100	1 (2.00)	1 (1.00)	2 (3.00)	3 (4.33)	4 (3.00)	13 (5.08)	7 (4.57)	14 (8.43)	5 (6.20)	6 (4.83)	56 (5.54)
100-150	2 (8.50)	1 (1.00)			4 (3.75)	5 (6.20)	4 (3.00)	7 (4.29)	1 (2.00)	11 (2.18)	35 (3.77)
150-200				2 (3.00)			1 (3.00)	1 (2.00)	2 (4.00)	9 (4.56)	15 (4.00)
Over 20	1 (1.00)						1 (1.00)			3 (5.67)	5 (3.80)
TOTAL	128 (5.66)	64 (6.06)	67 (4.76)	55 (6.42)	71 (5.38)	91 (6.07)	37 (5.59)	54 (6.09)	20 (4.85)	33 (4.03)	620 (5.62)

(Figures in brackets indicate average household size).

TABLE 7b

DISTRIBUTION OF HOUSEHOLDS BY PER CAPITA MONTHLY EXPENDITURE (*PCE*) AND PER DIEM CONSUMPTION OF CALORIES PER UNIT (*PUCAL*)—KARNATAKA URBAN SAMPLE—1973-74

PUCAL (*K.Cals*) / *PCE* (*Rs*)	*0-1500*	*1500-1700*	*1700-1900*	*1900-2100*	*2100-2300*	*2300-2700*	*2700-3000*	*3000-3500*	*3500-4000-*	*Over 4000*	*Total*
0-13											
13-15											
15-18	1 (8.00)										1 (8.00)
18-21	2 (4.50)										2 (4.50)
21-24	3 (8.67)										3 (8.67)
24-28	7 (6.86)	2 (4.50)		1 (13.00)	1 (9.00)						11 (7.18)
28-34	14 (6.86)	4 (7.25)	2 (6.00)	3 (5.00)							23 (6.61)
34-43	21 (6.81)	14 (8.07)	5 (6.00)	8 (5.00)	2 (5.50)	1 (6.00)	2 (5.00)				53 (6.66)
43-55	17 (6.35)	8 (4.88)	8 (5.88)	4 (6.75)	4 (5.75)	5 (7.80)	3 (7.33)	2 (7.00)			51 (6.25)

55-75	14 (5.36)	6 (9.33)	18 (5.83)	8 (6.63)	10 (5.10)	17 (3.88)	5 (4.80)	6 (7.33)	4 (4.50)	2 (6.50)	90 (5.61)
75-100	2 (3.00)	2 (5.00)	3 (4.67)	8 (2.88)	7 (6.29)	14 (4.93)	8 (4.75)	5 (6.00)	3 (3.00)	1 (4.00)	53 (4.66)
100-150	4 (1.00)	2 (5.00)	4 (5.00)	5 (5.60)	4 (3.75)	15 (1.87)	8 (4.63)	2 (4.50)	2 (4.00)	2 (4.00)	48 (3.48)
150-200	4 (2.25)	1 (1.00)		2 (1.00)	3 (5.67)	2 (1.00)	1 (1.00)	1 (3.00)	2 (5.50)	4 (3.00)	20 (2.99)
200 +	2 (1.00)	1 (3.00)	1 (4.00)	1 (1.00)	1 (5.00)	2 (2.50)	1 (2.00)	3 (3.33)	1 (1.00)	1 (3.00)	14 (2.57)
TOTAL	91 (5.87)	40 (6.75)	41 (5.66)	40 (5.05)	32 (5.47)	56 (3.84)	28 (4.79)	19 (5.79)	12 (3.92)	10 (4.00)	369 (5.31)

(Figures in brackete indicate average household size).

TABLE 8a

DISTRIBUTION OF HOUSEHOLDS IN RURAL KARNATAKA BY PER UNIT CALORIE INTAKE WITH AND WITHOUT OCCUPATION INFORMATION (NSS 28th Round), 1973-74

PUCAL* / PUCAL	0-1500	1500-1700	1700-1900	1900-2100	2100-2300	2300-2700	2700-3000	3000-3500	3500 +	Total
0-1500	48 (5.19)	47 (6.60)	13 (5.23)	14 (4.64)	12 (3.25)	—	—	—	—	134 (5.46)
1500-1700	—	9 (6.78)	18 (7.33)	10 (5.90)	18 (5.94)	7 (3.86)	—	—	—	62 (6.23)
1700-1900	—	—	11 (5.00)	18 (5.28)	15 (4.40)	20 (4.65)	2 (3.00)	—	—	66 (4.77)
1900-2100	—	—	—	11 (5.64)	26 (7.73)	14 (5.93)	3 (2.00)	1 (1.00)	—	55 (6.42)
2100-2300	—	—	—	—	13 (6.85)	43 (5.37)	4 (6.25)	10 (3.50)	1 (2.00)	71 (5.38)
2300-2700	—	—	—	—	—	34 (6.94)	27 (7.26)	19 (5.00)	8 (3.00)	88 (6.26)
2700-3000	—	—	—	—	—	—	14 (6.29)	18 (5.61)	5 (3.60)	37 (5.59)
3000-3500	—	—	—	—	—	—	—	23 (7.13)	31 (5.32)	54 (6.09)
3500 +	—	—	—	—	—	—	—	—	53 (4.34)	53 (4.34)
TOTAL	48 (5.19)	56 (6.63)	42 (6.07)	53 (5.30)	84 (5.98)	118 (5.68)	50 (6.42)	71 (5.58)	98 (4.48)	620 (5.62)

(Figures in the brackets indicate average household size).

TABLE 8b

DISTRIBUTION OF HOUSEHOLD IN URBAN KARNATAKA BY PER UNIT CALORIE INTAKE WITH AND WITHOUT OCCUPATION INFORMATION (NSS 28TH ROUND), 1973-74

PUCAL* / PUCAL	0-1500	1500-1700	1700-1900	1900-2100	2100-2300	2300-2700	2700-3000	3000-3500	3500 +	Total
0-1500	44 (5.68)	21 (6.52)	15 (5.80)	10 (5.80)	1 (8.00)	—	—	—	—	91 (5.87)
1500-1700	—	12 (6.33)	8 (8.38)	9 (6.33)	7 (8.00)	3 (4.00)	1 (2.00)	—	—	40 (6.75)
1700-1900	—	—	14 (5.64)	8 (5.75)	8 (6.38)	5 (7.20)	5 (3.60)	1 (2.00)	—	41 (5.66)
1900-2100	—	—	—	16 (5·94)	16 (4.25)	4 (6.00)	3 (4.67)	1 (1.00)	—	40 (5.05)
2100-2300	—	—	—	—	17 (6.00)	9 (5.56)	1 (2.00)	4 (5.00)	1 (1.00)	32 (5.47)
2300-2700	—	—	—	—	—	38 (3.42)	9 (5.11)	5 (5.60)	4 (2.75)	56 (3.84)
2700-3000	—	—	—	—	—	—	23 (4.83)	2 (3.00)	3 (5.67)	28 (4.79)
3000-3500	—	—	—	—	—	—	—	11 (7.18)	8 (3.88)	11 (5.79)
3500+	—	—	—	—	—	—	—	—	22 (3.96)	22 (3.96)
TOTAL	44 (5.68)	33 (6.45)	37 (6.30)	43 (5.95)	49 (5.69)	59 (4.27)	42 (4.60)	24 (5.67)	38 (3.87)	369 (5.31)

(Figures in the bracket indicate average household) size).

TABLE 9*a*

DISTRIBUTION OF HOUSEHOLDS BY FOOD SHARE (*FS*) AND CONSUMPTION OF CALORIES PER DIEM PER UNIT (*PUCAL*) –KARNATAKA RURAL SAMPLE—NSS 28TH ROUND—1973/74

PUCAL (*K. Cals*) / *FS* %	*0-1500*	*1500-1700*	*1700-1900*	*1900-2100*	*2100-2300*	*2300-2700*	*2700-3000*	*3000-3500*	*3500-4000*	*Over 4000*	*Total*
100-90	10 (6.50)	11 (5.91)	3 (5.33)	6 (8.50)	4 (6.00)	12 (6.83)	5 (8.00)	4 (6.00)	3 (4.67)	6 (3.33)	64 (6.27)
90-80	49 (6.16)	35 (6.40)	36 (5.22)	27 (6.89)	40 (5.02)	39 (5.74)	10 (6.60)	24 (4.88)	7 (4.00)	11 (3.09)	278 (5.65)
80-70	41 (4.98)	11 (5.91)	20 (4.25)	11 (4.45)	17 (5.65)	20 (5.75)	13 (4.92)	12 (8.67)	7 (6.43)	4 (5.00)	156 (5.43)
70-60	13 (5.31)	5 (4.80)	4 (3.25)	6 (7.33)	5 (5.00)	8 (5.00)	4 (4.00)	8 (6.38)	1 (2.00)	3 (5.00)	57 (5.25)
60-50	8 (4.88)	2 (5.00)	3 (5.00)	2 (4.50)	5 (7.20)	9 (7.89)	4 (4.50)	5 (6.20)	1 (2.00)	4 (6.25)	43 (5.95)
50-40	2 (8.00)		1 (2.00)	2 (5.00)		1 (4.00)	1 (3.00)			2 (3.00)	9 (4.56)
40-30	4 (6.00)			1 (4.00)		2 (8.00)		1 (2.00)	1 (6.00)	3 (4.33)	12 (5.42)
30-20	1 (5.00)										1 (5.00)
20-10											
Below 10											
TOTAL	128 (5.66)	64 (6 06)	67 (4.76)	55 (6.42)	71 (5.38)	91 (6.07)	37 (5.59)	54 (6.09)	20 (4.85)	33 (4.03)	620 (5.62)

(Figures in brackets indicate average household size).

Table 9b

DISTRIBUTION OF HOUSEHOLDS BY FOOD SHARE (*FS*) AND CONSUMPTION OF CALORIES PER DIEM PER UNIT (*PUCAL*)—KARNATAKA URBAN SAMPLE—N S S 28TH ROUND SAMPLE—1973/74

PUCAL (*K. Cals*) / *FS* %	*0-1500*	*1500-1700*	*1700-1900*	*1900-2100*	*2100-2300*	*2300-2700*	*2700-3000*	*3000-3500*	*3500-4000*	*Over 4000*	*Total*
100-90	2 (3.50)	1 (4.00)		4 (2.75)	1 (5.00)	10 (1.00)	1 (4.00)	1 (10.00)			20 (2.55)
90-80	27 (6.15)	14 (7.29)	10 (5.50)	18 (5.39)	8 (4.88)	11 (5.09)	9 (6.33)	4 (5.25)	5 (4.40)	4 (5.00)	110 (5.77)
80-70	35 (5.89)	13 (6.15)	12 (5.00)	5 (4.60)	10 (7.00)	19 (4.16)	7 (4.29)	7 (7.14)	3 (2.00)	2 (3.50)	113 (5.41)
70-60	16 (4.63)	6 (7.50)	11 (7.00)	8 (4.88)	7 (4.14)	9 (5.44)	8 (4.00)	2 (3.00)	2 (5.50)	2 (4.50)	71 (5.23)
60-50	8 (7.38)	4 (7.00)	3 (6.00)	2 (2.00)	1 (5.00)	5 (3.40)	1 (1.00)	3 (5.33)	1 (3.00)	2 (2.00)	30 (5.17)
50-40	2 (8.00)		3 (5.00)	2 (4.00)	3 (5.33)	2 (2.00)	2 (5.00)	2 (3.50)	1 (5.00)		17 (4.76)
40-30	1 (6.00)	2 (5.50)	2 (3.50)	1 (20.00)	2 (5.50)						8 (6.88)
30-20											
20-10											
10-00											
TOTAL	91 (5.87)	40 (6.75)	41 (5.66)	40 (5.05)	32 (5.47)	56 (3.84)	28 (4.79)	19 (5.79)	12 (3.92)	10 (4.00)	369 (3.31)

(Figures in brackets indicate average household size).

TABLE 10*a*

DISTRIBUTION OF HOUSEHOLDS ACCORDING TO CEREAL SHARE (*CS*) AND PER DIEM AVERAGE CONSUMPTION OF CALORIES PER UNIT (*PUCAL*)—KARNATAKA RURAL SAMPLE—NSS 28TH ROUND—1973-74

PUCAL (*K Cals*) / *C. S.* (%)	*0-1500*	*1500-1700*	*1700-1900*	*1900-2100*	*2100-2300*	*2300-2700*	*2700-3000*	*3000-3500*	*3500-4000*	*Over 4000*	*Total*
90-100											
80-90	1 (4.00)	1 (5.00)									2 (4.50)
70-80	11 (5.36)	9 (5.67)	2 (5.00)	5 (9.00)	6 (5.67)	3 (6.33)	3 (13.33)	2 (5.00)	4 (4.50)	2 (4.00)	47 (6.26)
60-70	20 (6.20)	14 (7.29)	26 (4.58)	9 (6.11)	14 (6.07)	17 (5.47)	8 (6.00)	14 (5.64)	5 (5.40)	2 (3.50)	129 (5.73)
50-60	32 (5.84)	21 (6.43)	17 (5.71)	14 (7.14)	23 (5.13)	29 (6.21)	7 (6.29)	13 (5.77)	4 (3.50)	11 (3.91)	171 (5.81)
40-50	33 (5.33)	9 (6.44)	12 (4.75)	14 (6.14)	12 (5.50)	20 (7.10)	11 (4.18)	16 (7.19)	5 (6.00)	7 (4.43)	139 (5.81)
30-40	16 (5.31)	4 (5.00)	6 (3.67)	9 (5.56)	7 (4.57)	9 (4.89)	4 (3.25)	6 (6.17)		6 (4.17)	67 (4.90)
20-30	7 (6.43)	3 (4.67)	4 (3.50)	1 (3.00)	6 (6.17)	8 (8.13)	2 (6.00)	3 (4.33)		3 (4.33)	37 (5.84)
10-20	5 (7.20)	1 (1.00)		2 (6.00)	2 (3.50)	1 (4.00)	2 (2.00)		2 (4.00)	2 (3.00)	17 (4.59)
Below 10	3 (2.67)	2 (1.00)		1 (2.00)	1 (3.00)	4 (1.25)					11 (1.82)
All Classes	128 (5.66)	64 (6.06)	67 (4.76)	55 (6.42)	71 (5.38)	91 (6.07)	37 (5.59)	54 (6.09)	20 (4.85)	33 (4.03)	620 (5.62)

(Figures in brackets indicate average household size).

TABLE 10b

DISTRIBUTION OF HOUSEHOLDS ACCORDING TO CEREAL SHARE (*CS*) AND PER DIEM AVERAGE CALORIE CONSUMPTION PER UNIT (*PUCAL*)—KARNATAKA URBAN SAMPLE—NSS 28TH ROUND—1973-74

PUCAL (*K Cals*) / *C. S.* %	*0-1500*	*1500-1700*	*1700-1900*	*1900-2100*	*2100-2300*	*2300-2700*	*2700-3000*	*3000-3500*	*3500-4000*	*Over 4000*	*All Classes*
90-100											
80-90											
70-80								1 (4.00)	1 (4.00)	1 (2.00)	3 (3.33)
60-70	6 (6.00)	1 (5.00)		3 (5.00)			2 (5.00)	2 (7.50)	1 (2.00)	1 (5.00)	16 (5.50)
50-60	14 (7.57)	14 (7.91)	4 (6.00)	4 (7.50)	5 (5.60)	4 (3.75)	3 (7.67)	3 (4.33)	1 (9.00)	1 (4.00)	50 (6.78)
40-50	18 (5.94)	8 (6.63)	8 (4.38)	10 (5.90)	7 (5.86)	16 (6.44)	5 (4.00)	1 (16.00)	2 (3.50)	2 (7.00)	77 (5.91)
30-40	21 (6.52)	11 (6.91)	14 (6.93)	8 (5.75)	9 (5.56)	6 (6.33)	5 (4.20)	6 (6.00)	4 (5.25)		84 (6.12)
20-30	15 (6.40)	4 (6.00)	11 (5.00)	5 (7.60)	4 (5.75)	5 (4.40)	10 (5.00)	5 (4.60)	2 (4.00)	2 (3.50)	63 (5.49)
20-10	6 (5.83)	3 (7.00)	3 (5.67)	1 (1.00)	5 (4.80)	3 (5.00)	1 (4.00)		1 (4.00)	3 (2.67)	26 (4.96)
Below 10	11 (1.55)	2 (2.00)	1 (4.00)	9 (1.44)	2 (4.50)	22 (1.00)	2 (3.00)	1 (3.00)			50 (1.56)
All Classes	91 (5.87)	40 (6.75)	41 (5.66)	40 (5.05)	32 (5.47)	56 (3.84)	28 (4.79)	19 (5.79)	12 (3.92)	10 (4.00)	369 (5.31)

(Figures in brackets indicate average household size).

TABLE 11

DISTRIBUTION OF HOUSEHOLDS ACCORDING TO PER CAPITA MONTHLY CONSUMPTION EXPENDITURE (*PCE*)—KARNATAKA—NSS 28TH ROUND DATA—1973/74

P.C.E. Class (Rs)	*Rural Households*							*Urban Households*						
	Number	*%*	*Aver. Size*	*Popln. %*	*Aver. CS (%)*	*Aver. FS (%)*	*Average PUCAL (K Cals)*	*Number*	*%*	*Aver. Size*	*Popln. %*	*Aver. CS*	*Aver. (FS (%)*	*Average PUCAL (K Cals)*
0-13	1	0.16	3.00	0.09	58.40	66.67	203.97	—	—	—	—	—	—	—
13-15	3	0.48	7.67	0.66	63.49	85.56	1119.50	—	—	—	—	—	—	—
15-18	3	0.48	8.00	0.68	52.07	80.04	1050.75	1	0.27	8.00	0.41	45.86	82.10	746.79
18-21	10	1.61	7.10	2.04	63.84	85.71	1178.50	2	0.54	4.50	0.46	63.61	87.87	1000.66
21-24	22	3.55	6.77	4.28	63.75	85.32	1443.88	3	0.81	8.67	1.33	46.96	81.97	1141.03
24-28	35	5.65	6.51	6.54	57.77	81.82	1466.08	11	2.98	7.18	4.03	54.74	84.11	1521.57
28-34	85	13.71	5.85	14.27	57.70	81.93	1665.83	23	6.23	6.61	7.76	48.58	78.69	1337.22
34-43	114	18.39	6.03	19.72	54.02	82.13	1889.10	53	14.36	6.66	18.02	45.88	78.53	1553.78
43-55	116	18.71	5.86	19.52	50.15	79.82	2104.53	51	13.82	6.25	16.28	40.82	76.15	1798.64
55-75	120	19.36	5.01	17.25	49.41	77.24	2573.03	90	24.39	5.61	25.78	36.19	73.04	2086.27
75-100	56	9.03	5.54	8.90	44.84	72.76	3078.28	53	14.36	4.66	12.61	32.77	71.98	2480.36
100-150	35	5.65	3.77	3.79	30.07	57.16	3065.36	48	13.01	3.48	8.53	19.12	56.33	2623.49
150-200	15	2.42	4.00	1.72	28.42	52.40	4999.70	20	5.42	2.90	2.96	14.62	54.86	3327.43

Over 200	5	0.81	3.80	0.54	29.16	48.16	6835.20	14	3.79	2.57	1.84	12.57	50.64	2644.25
All Classes	620	100.00	5.62	100.00	47.53	74.56	2170.78	369	100.00	5.31	100.00	32.08	68.68	1935.09
Rural				*Further Aggregation*							*Further Aggregation*			
0.52.72	363	58.55	6.11	63.69	58.80	81.74	1760.44	—	—	—	—	—	—	—
52-72-100	202	32.58	5.22	30.25	48.24	76.33	2647.03	—	—	—	—	—	—	—
Over 100	55	8.87	3.84	[6.06	29.54	55.04	3955.10	—	—	—	—	—	—	—
Urban														
0-65.00	—	—	—	—	—	—	—	194	52.58	6.24	61.82	43.07	76.99	1684.44
65.00-150	—	—	—	—	—	—	—	141	38.21	4.64	33.38	29.09	66.95	2376.19
Over 150	—	—	—	—	—	—	—	34	9.21	2.77	4.80	13.78	53.12	3011.11

TABLE 12

DISTRIBUTION OF HOUSEHOLDS ACCORDING TO CEREAL SHARE (*CS*)—KARNATAKA NSS DATA 28TH ROUND SAMPLE

Cereal Share Group (%)	*Rural H.H.*						*Urban H.H.*					
	Number	*%*	*Aver. Size*	*Popln. %*	*Aver. P.C.E (Rs)*	*Average Calories Per Unit (K Cals)*	*Number*	*%*	*Aver. Size*	*Popln. %*	*Average P.C.E. (Rs)*	*Avevrage Calories Per Unit (K Cals)*
90-100	—	—	—	—	—	—	—	—	—	—	—	—
80-90	2	0.32	4.5	0.26	20.44	1489.84	—	—	—	—	—	—
70-80	47	7.58	6.26	8.44	38.17	3103.34	3	0.81	3.33	0.51	65.59	3623.63
60-70	129	20.81	5.73	21.21	41.63	2095.34	16	4.34	5.50	4.49	38.39	1964.59
50-60	171	27.58	5.81	28.50	44.74	2134.26	50	13.55	6.78	17.31	41.18	2167.02
40-50	139	22.42	5.81	23.16	54.60	2289.80	77	20.87	5.91	23.23	53.10	2021.67
30-40	67	10.81	4.90	9.42	66.12	2233.61	84	22.76	6.12	26.24	61.47	1840.29
20-30	37	5.97	5.84	6.20	86.41	2276.46	63	17.07	5.49	17.66	83.69	2003.62
10-20	17	2.74	4.59	2.24	115.41	2109.29	26	7.05	4.96	6.58	116.86	2154.11
Below 10	11	1.77	1.82	0.57	107.19	1552.83	50	13.55	1.56	3.98	159.16	1873.61
All Classes	620	100.00	5.63	100.00	52.26	2170.51	369	100.00	5.31	100.00	66.46	1935.09
			Further Aggregation									
Above 80	2	0.32	4.50	0.26	20.44	1489.84	—	—	—	—	—	—
60-80	176	28.39	5.87	29.65	40.64	2097.61	19	5.15	5.16	5.00	41.16	2149.12
30-60	377	60.81	5.65	61.08	51.77	2209.24	211	57.18	6.20	66.78	53.30	1897.83
Below 30	65	10.48	4.83	9.01	94.94	2182.58	139	37.67	3.98	28.24	102.07	2011.24

(*H.H.* = Household) (*P.C.E.* = Per Capita Expenditure)

TABLE 13

DISTRIBUTION OF HOUSEHOLDS ACCORDING TO FOOD SHARE (*FS*)—KARNATAKA—NSS 28TH ROUND SAMPLE—1973-74

Food Share Group (%)	*Rural Households*						*Urban Households*					
	Number	*%*	*Aver. Size*	*Popln. %*	*Aver. P.C.E. (Rs)*	*Average Calories Per Unit (K Cals)*	*Number*	*%*	*Aver. Size*	*Popln. %*	*Aver. P.C.E. (Rs)*	*Average Calories Per Unit (K Cals)*
90-100	64	10.32	6.27	11.51	44.76	2240.46	20	5.42	2.55	2.60	58.26	2082.16
80-90	278	44.84	5.65	45.06	41.81	2065.85	110	29.81	5.77	32.42	47.67	1975.47
70-80	156	25.16	5.43	24.31	51.43	2160.67	113	30.62	5.41	31.19	57.64	1844.34
60-70	57	9.19	5.25	8.58	62.13	2305.91	71	19.24	5.23	18.94	79.92	2025.67
50-60	43	6.94	5.95	7.35	83.99	2611.58	30	8.13	5.17	7.91	89.82	1881.73
40-50	9	1.45	4.56	1.18	103.71	2283.82	17	4.61	4.76	4.13	125.39	2127.86
30-40	12	1.94	5.42	1.87	161.21	2659.46	88	2.17	6.88	2.81	145.69	1854.76
20-30	1	0.16	5.00	0.14	38.06	956.87	—	—	—	—	—	—
10-20	—	—	—	—	—	—	—	—	—	—	—	—
Below 10	—	—	—	—	—	—	—	—	—	—	—	—
All Classes	620	100.00	5.62	100.00	52.28	2170.51	369	100.00	5.31	100.00	66.46	1935.09
	Further Aggregation											
Above 80	342	55.16	5.76	56.57	42.457	2082.87	130	35.23	5.28	35.02	48.46	1983.14
50-40	256	41.29	5.47	40.24	59.66	2273.39	214	57.99	5.31	58.04	69.29	1899.65
Below 50	22	3.55	5.05	3.19	134.43	2451.19	25	6.78	5.44	6.94	133.60	2000.82

TABLE 14

DISTRIBUTION OF HOUSEHOLDS ACCORDING TO AVERAGE DAILY CONSUMPTION OF CALORIES PER UNIT (*PUCAL*) KARNATAKA—NSS 28TH ROUND DATA—1973-74

PUCAL Class (K Cals)	*Rural*						*Urban*					
	Number	%	*Aver. Size*	*Popln. %*	*Aver. PEC (Rs)*	*Daily Average Protein Intake/ Unit (mg)*	*Number*	%	*Aver. Size*	*Popln. %*	*Aver. PEC (Rs)*	*Daily Average Protein Intake Per Unit (mg)*
Below 1500	128	20.65	5.66	20.78	33.93	41.00	91	24.66	5.87	27.26	44.21	38.03
1500-1700	64	10.32	6.06	11.14	34.98	52.30	40	10.84	6.75	13.78	51.50	48.36
1700-1900	67	10.81	4.76	9.16	41.31	58.13	41	11.11	5.66	11.84	65.66	53.05
1900-2100	55	8.87	6.42	10.13	45.77	57.30	40	10.84	5.05	10.31	64.14	55.84
2100-2300	71	11.45	5.38	10.97	48.42	66.59	32	8.67	5.47	8.93	84.34	58.34
2300-2700	91	14.68	6.07	15.84	58.90	73.34	56	15.18	3.84	10.98	79.93	63.56
2700-3000	37	5.97	5.59	5.94	63.81	75.69	28	7.59	4.79	6.84	87.04	70.62
3000-3500	54	8.71	6.09	9.44	71.28	86.86	19	5.15	5.79	5.62	93.65	81.47
3500-4000	20	3.23	4.85	2.78	79.33	99.26	12	3.25	3.92	2.40	110.85	90.87
Over 4000	33	5.32	4.03	3.82	145.30	169.36	10	2.72	4.00	2.04	134.52	129.11
All Classes	620	100.00	5.62	100.00	52.28	66.42	369	100.00	5.31	100.00	66.46	55.56

Further Aggregation

Below 1500	128	20.65	5.66	20.78	33.93	41.00	91	24.66	5.87	27.26	44.21	38.03
1500-1900	131	21.13	5.40	20.29	37.84	60.59	81	21.95	6.20	25.63	58.04	50.53
1900-2300	126	20.32	5.83	21.10	47.15	62.16	72	19.52	5.24	19.25	73.52	57.01
2300-3000	128	20.65	5.92	21.79	60.24	73.98	84	22.76	4.16	17.82	82.66	66.25
Above 3000	107	17.26	5.22	16.05	90.29	108.76	41	11.11	4.81	10.06	106.05	93.26