COST OF LIVING INDEX FOR INDUSTRIAL LABOUR AT CAWNPORE.

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SCOPE AND METHOD OF COMPILATION.

The general cost of living of the mill hand comprises his expenditure under various heads and different articles of consumption. Standards of consumption and nature of articles differ with region, religion, caste and income. Fluctuations in prices differ with the nature, quality and variety of articles and it is hardly possible to ascertain, at a glance, the general rise or fall in prices. A change in the general level of prices does not necessarily mean, and in practice never does mean, that all prices change at the same rate ; and even when the general level remains unchanged, some commodities move up and some move down. In order to obtain a measure of the general movement of prices of those commodities which enter into the cost of living of the workers the method of index numbers was adopted. A series of commodities were selected and their prices for the base period taken and equated to 100. Variations in prices in subsequent years were expressed in the form of indices which showed the per cent. rise or fall in prices. In the present enquiry the quinquennium immediately preceding the Great War was taken as the base period. This period was fairly normal from the point of view of price fluctuations ; and five years' average will mitigate the effect of abnormalities, in any year during this period, if any. The enquiry covers a period of two decades, *i.e.*, from 1914 to 1934, and includes the years of boom, depression and the period of transition between the two. From 1914 to 1921 was the war boom period ; from 1929 to 1934 was the period of depression and the years 1922 to 1928 mark the transition period which shows a gradual disappearance of the war boom and the in-coming of the world depression.

A change in the cost of living may be due to (1) a change in the purchasing power of money, (2) a change in the commodities consumed, and (3) to a combination of the above two factors. A cost of living index deals with the variations caused by the prices alone. In other words, it measures the change in the purchasing power of money. The particular commodities and the quantities of those commodities consumed were assumed to be the same in the subsequent years as in the base period. A change in the commodities consumed may be due to a change in tastes and fashion, or it may be due to a rising price level for the commodity which makes the use of the article prohibitive for the poorer classes. A lowering of the standard of living of a community may be explained more by the second factor than by the first. This is true to a large extent in the case of Indian masses. The labouring classes have to live on an inferior diet due to purely economic reasons.

For the present enquiry, only the variations in the purchasing power of money were taken into account. It was assumed that the quality and the quantity of the articles consumed remained the same. Articles selected for calculating the index numbers were those that are generally used by the labourers.

At Cawnpore out of 729 family budgets collected by a process of random sampling there were 80.2% Hindus, 18.2% Mohammadans and 1.6% Christians. But for minor differences, due to customs and habits, budgets of the workers in the same economic grade from all the communities were more or less of the same type and showed same peculiarities. In the same way, among the Hindus, differences in the diet of the workers belonging to different sub-castes of the Hindus were at times noticeable ; but in the present enquiry, to avoid minute classification and sub-classification, such differences were ignored.

Disparity in the budgets of the workers was studied purely on the basis of income grades, and an attempt was made to give due weight to the various economic grades among the industrial workers in the city.

Most of the Hindu workers were living on vegetarian diet, and hence a vegetarian diet was taken to be the basis for enquiry. Due to the absence of any published price statistics for articles like meat, fish, sweetmeats, milk, vegetables, fruits and the like, it was not possible to calculate the variations in the price indices of these commodities, and in this enquiry these articles were left out from the budget of a labourer.

Food was subdivided into three distinct heads: (a) cereals, (b) pulses, and (c) articles of food other than cereals and pulses. As far as available, retail prices have been collected because the workers rarely make wholesale purchases. In the case of (c) articles of food other than cereals and pulses such as butter, sugar, salt, linseed, oil, spices, etc., retail prices for these commodities are not quoted in any reliable publication. Moreover, in an enquiry where the movement of prices for various articles is reckoned in terms of indices, retail or wholesale prices are not likely to make much difference provided that for a commodity the same prices, retail or wholesale, are taken for the whole period.

COLLECTION OF PRICE STATISTICS.

Information as to the predominant retail price, in various years, of cereals, pulses and some of the articles of food other than cereals and pulses, as far as available was collected from the Government Gazettes published every week. Other prices were taken from the declared value of exports and imports of India as published annually in the *Sea-Borne Trade of British India*, and the *Indian Trade Journal* issued by the Director of Commercial Intelligence, Calcutta. Price variations in cloth were gathered from prices quoted in the *Review of the Trade of India* and the *Sea-Borne Trade of British India*. Reliable records of house rent in the city were not available ; the hand workers were also not in a position to narrate the changes in house rent during the whole period of the enquiry. Most of them change their residences with a change in their factory or mill. There was hardly any case where the labourer had been occupying the same house for a period of twenty years. In many cases, a rise in rent was preceded by an increase in accommodation or the comforts in the house. This increase, therefore, was not a pure rise in rent but it included a compensation for the additional facilities. In some cases, an addition for water charge in the house rent was taken to be a rise in rent. Figures for rent were collected from private *bustis* or *hâtas* (small compounds belonging to private landlords) and the quarters in settlements provided by the factories.

Charges paid for the various services like the sweeping of the latrines, shaving charges, washing charges, medical fees, education expenses, conveyance charges, railway fares and the like do affect the budget of the worker but a study of the variations under these heads is not possible due to the absence of data and these items had to be ignored.

Tables 1 to 4 show the movement of prices and indices of cereals and pulses and articles of food other than cereals and pulses consumed by the workers at Cawnpore :—

TABLE 1.   RETAIL PRICES CURRENT OF CEREALS AND PULSES PER MAUND IN RUPEES.

Year	Common Rice	Wheat	Gram	Arhardal	Year	Common Rice	Wheat	Gram	Arhardal
1909	4·7	4·4	3·0	3·6	1921	8·8	7·5	6·1	8·4
1910	4·4	3·6	2·8	3·0	1922	7·7	7·8	5·5	6·8
1911	4·4	3·2	2·0	2·6	1923	6·6	5·1	3·9	5·0
1912	4·3	3·4	2·2	3·1	1924	6·9	5·1	3·2	5·0
1913	5·1	3·8	2·7	3·9	1925	7·4	6·8	4·0	5·4
					1926	7·8	6·8	4·4	6·8
Average	4·6	3·7	2·4	3·2	1927	7·8	5·5	4·5	7·8
					1928	7·9	5·6	4·5	7·5
1914	5·2	4·5	3·9	5·3	1929	8·2	5·7	5·6	7·8
1915	5·4	5·1	3·5	5·5	1930	6·4	3·7	3·9	6·1
1916	5·0	4·3	3·0	4·7	1931	4·5	2·7	2·8	4·5
1917	5·5	4·5	3·0	3·8	1932	4·7	3·4	2·8	4·5
1918	6·3	5·7	3·0	4·7	1933	4·5	3·8	2·5	4·0
1919	8·0	7·2	6·8	9·8	1934	4·0	2·9	2·8	3·9
1920	9·3	6·5	5·3	9·8	1935	4·6	3·1	2·4	3·0

TABLE 2.   PRICES OF ARTICLES OF FOOD OTHER THAN CEREALS AND PULSES IN RUPEES.

Year	Linseed per Maund	Ghee per Cwt.	Raw Sugar per Maund	Refined Sugar per Ton	Salt per Maund	Spices per Cwt.				Simple Average of all Spices
						Pepper	Chillies	Ginger	Other Spices	
1909	6·0		5·5		1·0					
1910	8·2	49·8	6·2	146·0	1·0	26·9	17·9	28·0	68·8	85·8
1911	8·8		5·8		1·0					
1912	7·6		5·2		1·6					
1913	5·7	65·0	4·4	156·0	1·0	85·8	15·7	25·8	81·8	89·6
Average	7·8	57·1	5·3	151·0	1·0	81·8	16·8	27·0	75·0	87·3
1914	5·7	68·8	5·3	140·4	1·0	34·7	13·4	22·4	97·4	42·0
1915	4·8	65·9	6·7	161·7	1·8	32·6	18·2	19·3	104·8	43·8
1916	5·4	65·1	6·2	221·6	2·4	34·0	10·8	19·1	104·2	44·8
1917	5·2	64·8	6·4	199·2	2·7	49·3	20·1	22·0	78·4	42·7
1918	5·7	76·0	5·8	316·3	3·3	52·8	20·0	26·7	98·9	49·7
1919	11·8	90·2	8·2	402·3	2·7	53·5	34·8	28·7	92·7	52·8
1920	10·8	112·6	10·6	327·7	3·1	53·6	54·7	81·4	121·8	60·4
1921	9·0	93·0	12·5	436·0	2·9	42·7	22·2	28·4	104·7	49·5
1922	9·1	95·0	9·8	414·3	3·0	29·8	28·1	26·5	86·5	42·6
1923	8·4	107·5	6·7	262·8	8·8	30·6	30·6	84·2	146·0	50·7
1924	8·8	106·4	7·0	742·6	3·0	30·8	26·2	45·2	177·5	69·0
1925	8·6	103·3	8·6	230·0	2·8	34·1	27·2	55·8	109·2	78·9
1926	7·2	97·0	8·9	278·3	2·5	72·3	26·3	53·0	225·0	91·8
1927	7·1	101·2	6·1	280·0	2·3	61·7	20·1	80·5	214·1	86·1
1928	7·0	98·1	6·5	260·3	2·5	78·8	23·0	37·0	175·6	78·7
1929	8·8	97·3	8·0	274·0	2·3	92·0	20·0	40·0	178·8	82·9
1930	7·1	97·6	6·8	368·0	2·6	87·3	20·9	40·0	101·3	86·4
1931	4·4	133·0	4·0	251·0	2·3	51·7	20·0	52·0	129·6	53·8
1932	4·0	82·5	4·8	102·0	2·5	39·8	14·3	23·4	151·8	57·8
1933	5·4	72·3	5·0	248·0	1·5	37·9	12·8	20·2	135·0	51·7
1934	3·9	55·5	4·3	251·8	2·7	30·9	11·9	19·2	142·0	52·0
1935	4·3	64·5	5·8	245·0	2·7	—	—	—	—	—

TABLE 3.   INDEX NUMBERS OF RETAIL PRICES FOR CEREALS AND PULSES.

Year	Common Rice	Wheat	Gram	Arhardal	Year	Common Rice	Wheat	Gram	Arhardal
Average 1909-13	100	100	100	100	1924	150	138	92	156
1914	118	122	168	164	1925	161	170	167	169
1915	120	138	146	172	1926	170	170	164	213
1916	123	116	125	147	1927	170	140	188	244
1917	120	122	123	119	1928	172	151	188	234
1918	137	154	168	147	1929	178	154	233	244
1919	174	193	283	306	1930	139	100	163	101
1920	207	176	221	291	1931	98	73	96	141
1921	180	203	234	263	1932	102	92	96	141
1922	167	197	221	197	1933	98	89	104	125
1923	143	138	121	156	1934	87	78	96	122
					1935	100	84	100	156

TABLE 4.   INDEX NUMBERS OF PRICES FOR ARTICLES OF FOOD OTHER THAN CEREALS AND PULSES

Year	Linseed	Ghee	Raw Sugar	Refined Sugar	Salt	Pepper	Chillies	Ginger	Other Spices	Simple Average of all Spices
1909—13	100	100	100	100	100	100	100	100	100	100
1914	78	120	96	93	140	111	80	83	130	101
1915	66	115	122	107	180	104	108	72	140	106
1916	75	114	113	147	240	109	118	71	139	109
1917	71	120	116	132	270	138	120	77	105	115
1918	78	135	96	209	330	167	124	99	132	131
1919	161	158	131	267	270	171	204	106	124	151
1920	149	107	192	217	310	171	206	116	162	164
1921	123	166	227	287	200	136	132	105	140	128
1922	123	168	178	275	300	94	167	08	115	119
1923	115	183	122	174	360	08	182	127	114	138
1924	121	186	127	161	300	98	156	167	237	165
1925	118	181	156	166	260	109	162	205	266	186
1926	99	171	162	181	250	281	157	196	308	223
1927	97	177	111	191	250	107	173	146	283	200
1928	96	172	118	172	250	250	142	137	234	191
1929	121	170	145	181	250	294	124	148	238	201
1930	97	171	124	244	260	279	160	148	255	211
1931	60	233	89	166	250	163	119	119	173	144
1932	55	144	78	197	250	127	85	87	202	125
1933	47	127	55	150	150	121	76	75	181	113
1934	53	97	78	166	270	99	89	71	191	113
1935	59	100	06	162	270	—	—	—	—	—

A glance at these tables shows that all commodities do not have a uniform variation : some have risen too much while others actually show a fall in prices. In order to find out the average effect of the rise or fall in the value of these commodities, the simplest

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method would have been to total up all the indices and to divide them by the number of commodities. This is known as a simple arithmetic average. Such an average may record the rise or fall in the value of money but it would not be an accurate measure of the prosperity or adversity of any particular class or community. It may give us a wrong reading of the actual change in the cost of living of the industrial labourers. The importance of individual commodities differs from a point of view of consumption. A more adequate picture will be obtained by allotting different weights to the commodities according to their relative importance to the consumers.

FAMILY BUDGETS

Allotment of weights can be made on various principles and in this enquiry weights were calculated on the basis of actual family budgets. Even within the labouring masses there were wide differences in the standards of living. A minimum wage legislation does not exist in this country, and there is no standardisation of wages within an industry or a province. However, it can safely be said that a vast majority of the industrial labourers in this province gets below Rs. 50/- per mensem. Within this income group

TABLE 5. AVERAGE EXPENDITURE ON FOOD IN EACH INCOME GROUP.

Income ... Number of Families ...	Group I Rs. 50 to Rs. 60 76		Group II Rs. 40 to Rs. 50 143		Group III Rs. 50 to Rs. 15 880		Group IV Rs. 15 & below 128		Weight
	Expenditure		Expenditure		Expenditure		Expenditure		
Articles of Food	Actual	% to total	Actual	% to total	Actual	% to total	Actual	% to total	
	Rs. As. P.		Rs. As. P.		Rs. As. P.		Rs. As. P.		
Rice ...	2 4 9	22.0	1 13 10	25.0	1 5 6	28.6	0 13 6	21.1	23.3
Wheat ...	6 2 2	60.0	4 10 8	57.7	3 4 3	56.4	2 6 6	60.2	57.7
Gram ...	0 3 4	2.0	0 3 1	1.9	0 2 7	8.6	0 1 6	1.6	2.7
Arhardal & Pulses ...	1 10 7	16.0	1 7 2	15.4	0 15 9	16.4	0 11 5	17.1	16.8
Total	10 4 10	100.0	8 4 9	100.0	5 12 1	100.0	4 0 11	100.0	100.0
Gur ...	0 2 8	3.7	0 2 8	4.8	0 1 7	8.5	0 1 2	6.2	5.2
Sugar ...	0 9 0	11.1	0 5 11	9.5	0 3 0	10.8	0 1 6	6.3	9.6
Ghee ...	2 12 4	51.9	1 6 10	42.0	0 11 11	36.8	0 4 8	23.0	37.5
Salt ...	0 1 11	3.7	0 1 6	4.7	0 1 6	5.3	0 1 5	6.2	5.2
Spices ...	0 12 0	14.8	0 8 2	14.3	0 5 5	15.8	0 3 8	18.3	15.9
Oil ...	0 14 3	14.8	0 12 1	23.8	0 0 2	26.3	0 6 6	37.5	26.6
Total	5 4 8	100.0	3 5 5	100.0	2 0 7	100.0	1 2 7	100.0	100.0
Sweets ...	0 4 0	—	0 2 6	—	0 1 4	—	0 0 4	—	—
Meat & Fish ...	0 15 7	—	0 11 2	—	0 5 3	—	0 3 0	—	—
Milk ...	1 10 2	—	0 11 9	—	0 4 4	—	0 1 4	—	—
Vegetables & Fruits ...	1 2 0	—	0 14 10	—	0 9 6	—	0 6 6	—	—
Miscellaneous ...	0 14 6	—	1 10 2	—	1 7 1	—	0 10 4	—	—
Total	4 14 3	—	4 2 5	—	2 11 6	—	1 5 6	—	—

there are smaller sub-groups which are no less important. In the memorandum submitted by the Government of the United Provinces to the Royal Commission on Labour (1929) all workers at Cawnpore were divided into four income groups, namely, Rs. 15/- and below, above Rs. 15/- and upto Rs. 30/-, above Rs. 30/- and upto Rs. 40/-, and above Rs. 40/- and upto Rs. 50/-. Family budgets were collected for the different groups separately and it was on the basis of actual expenditure in each group that weights were allotted. Families were taken for this purpose on a random sampling basis.

Four indices were calculated for the labouring classes, one for each group. A general index for the labourers as a whole was then obtained by taking the weighted average index of these four groups, weights to the groups being allotted on the basis of their respective size in the sample.

EXPENDITURE ON FOOD.

Table 5 shows average expenditure on various items of food in each income group and their percentages to total expenses under food with the number of men in each grade.

In order to find out the weights for the items of food for Cawnpore labourers as a whole we have multiplied the percentage expenditure under each head in different grades by the number of men in the grade. These sums have been totalled up and divided by the number of labourers whose budgets were studied. This method gave due representation to every class of labourer in these weights. The final weight for Rice for example was calculated as follows :—

Rice : $[(76 \times 22) + (145 \times 25) + (380 \times 23\cdot6) + (128 \times 21\cdot1)] \div 729 = 23\cdot3$

TABLE 6.   WEIGHTED INDICES OF CEREALS AND PULSES.

Articles .	Rice		Wheat		Gram		Arhardal		Total of Cols. 2, 4, 6, & 8	Weighted Index No.
Weight ...	23·3		57·7		2·7		16·3			
Year.	Index No.	Weighted Product	Index No.	Weighted Product	Index No.	Weighted Product	Index No.	Weighted Product		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
1914	113	2632·9	122	7039·4	163	440·1	168	2705·8	12,818·2	128
1915	120	2796·0	138	7962·6	146	394·2	172	2803·6	13,956·4	140
1916	128	2982·4	116	6693·2	125	337·5	147	2396·1	12,409·2	124
1917	120	2796·0	122	7039·4	125	337·5	119	1939·7	12·112·6	121
1918	137	3192·1	154	6885·8	163	440·1	147	2396·1	14,914·1	149
1919	174	4054·2	195	11251·5	283	764·1	306	4987·8	21.057·6	210
1920	207	4823·1	176	10155·2	221	596·7	291	4743·3	20,318·3	203
1921	180	4194·0	203	11713·1	234	685·8	263	4286·9	20,879·8	209
1922	117	3801·1	197	11366·9	221	596·7	197	9211·1	19,665·8	191
1923	143	3331·9	138	7962·6	121	326·7	156	2542·8	14,164·0	142
1924	150	3495·0	138	7962·6	92	218·4	156	2542·8	14,448·8	144
1925	161	3751·8	170	9809·0	167	450·9	160	2754·7	16,765·9	168
1926	170	3961·0	170	9809·0	184	496·8	213	3471·9	17,738·7	177
1927	170	3961·0	119	8597·3	188	507·6	214	3977·2	17,043·1	170
1928	172	4007·6	151	8712·7	188	507·6	234	3814·2	17,042·1	170
1929	178	4147·4	154	8885·8	233	629·1	244	3977·2	17,709·5	177
1930	140	3262·0	100	5770·0	163	440·1	191	3113·3	12,585·4	126
1931	98	2283·4	75	4217·1	90	250·2	141	2298·3	9,053·8	91
1932	102	2376·6	92	5308·4	96	259·2	141	2298·3	10,242·5	102
1933	98	2283·4	89	5135·9	104	280·8	125	2037·5	9,737·0	97
1934	87	2027·1	78	4500·6	96	250·2	122	1988·6	8,775·5	88
1935	100	2330·0	84	4446·8	100	270·0	156	2512·8	9,980·6	100

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TABLE 7. WEIGHTED INDICES OF ARTICLES OF FOOD OTHER THAN CEREALS AND PULSES.

Articles Weight / Year	Linseed 2·6		Ghee 8·7·5		Raw Sugar or Gur 5·7		Refined Sugar 9·8		Salt 8·7		Spices 13·7		Sum of cols. 2, 4, 6, 8, 10 & 12	Weighted Index No.
	Index No.	Weighted Product	Index No.	Weighted Product	Index No.	Weighted Product	Index No.	Weighted Product	Index No.	Weighted Product	Index No.	Weighted Product		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
1914	78	2074·8	120	4200·0	96	499·2	93	872·8	100	520·0	101	1603·9	10,002·7	111
1915	66	1733·6	115	4312·5	122	634·4	107	1047·2	106	636·0	106	1685·4	10,331·1	104
1916	75	1933·9	114	4275·0	113	587·6	117	1411·2	240	1248·0	109	1723·1	11,239·0	112
1917	71	1835·8	120	4500·0	116	603·2	182	1567·2	270	1404·0	115	1873·5	11,401·5	115
1918	78	2014·8	133	5602·5	96	499·2	203	2006·4	330	1716·0	131	2082·9	12,441·8	131
1919	161	4185·6	135	5355·0	151	785·2	267	2563·2	270	1404·0	131	2090·9	17,350·9	175
1920	140	3763·4	197	7387·5	192	998·4	217	2085·2	310	1612·0	164	2607·6	18,652·1	187
1921	123	2771·8	166	6225·0	227	1180·4	257	2735·2	230	1304·0	124	2033·2	15,975·0	160
1922	123	3323·0	168	6300·0	178	925·6	275	2512·0	300	1560·0	119	1922·1	16,637·7	166
1923	115	3035·9	185	7030·0	122	634·4	171	1670·4	320	1872·0	133	2102·2	16,480·0	165
1924	121	3218·6	186	6735·0	127	660·4	161	1513·6	300	1560·0	163	2623·5	16,543·1	168
1925	118	3138·8	181	6637·5	135	811·2	166	1533·6	260	1312·0	155	2537·4	16,307·5	166
1926	99	2573·4	177	6112·5	162	842·4	161	1513·6	230	1200·0	273	3143·7	15,471·6	163
1927	97	2580·2	177	6537·5	111	577·2	191	1833·9	230	1300·0	290	3182·0	16,105·3	161
1928	96	2533·6	172	6140·0	118	613·0	172	1547·2	230	1300·0	191	3036·9	15,003·8	156
1929	121	3218·6	170	6375·0	145	754·0	181	1737·6	230	1300·0	201	3195·9	16,581·1	166
1930	97	2580·2	171	6142·5	124	645·8	214	2057·1	260	1352·0	211	3351·0	16,646·8	167
1931	60	1596·0	233	8237·5	89	462·8	165	1536·6	230	1380·0	114	282·8	13,075·3	160
1932	55	1462·0	131	5400·0	78	405·6	211	1219·2	230	1300·0	123	1947·5	11,775·3	118
1933	47	1250·2	127	4762·5	55	286·0	161	1513·1	130	780·0	115	1797·7	10,419·8	105
1934	53	1409·8	97	3637·5	78	405·6	164	1570·6	270	1404·0	118	1795·7	10,247·2	102
1935	59	1569·4	100	3750·0	86	470·2	162	1555·2	270	1610·0	—	—	8,777·8	103

Weights calculated in this way are shown in the last column of Table 5. The index number for cereals and pulses, and for articles of food other than cereals and pulses were then calculated with these weights. Certain articles like *bajra*, sweets, meat and fish, milk, vegetables, fruits and miscellaneous articles of food have been omitted. Most of these are consumed casually, temporarily or seasonally and hence an inclusion of these articles may depict a state of affairs which may be true only at a particular part of the year. Milk and meat were fairly permanent in consumption but no reliable statistics of prices were available for them.

LIGHT AND FUEL.

Let us now pass on to another important head in the cost of living index namely 'Light and Fuel'. For the purpose of lighting the workers generally used kerosene oil, but a few used mustard or castor oil as well. As for fuel, coal was not found in use anywhere. Dry cowdung and firewood were the chief things used as fuel, the former being used chiefly to light a fire. The prices of kerosene oil and firewood are given in Table 8.

TABLE 8. PRICES AND INDICES OF KEROSENE OIL AND FIREWOOD.

Year	Kerosene Oil Per gallon in Rupees	Index No.	Firewood Price per maund	Index No.	Year	Kerosene Oil Per gallon in Rupees	Index No.	Firewood Price per maund	Index No.
1912	·40	100	0—6—6	100	1923	·67	172	0—13—0	200
1913	·28				1924	·64	164	,,	200
1914	·41	105	,,	100	1925	·66	169	,,	200
1915	·41	105	,,	100	1926	·65	167	,,	200
1916	·43	110	,,	100	1927	·67	172	,,	200
1917	·54	138	,,	100	1928	·57	146	,,	200
1918	·60	154	,,	100	1929	·55	141	,,	200
1919	·86	221	0—13—0	200	1930	·55	141	0—8—1	125
1920	·70	179	,,	200	1931	·54	138	,,	125
1921	·75	192	,,	200	1932	·51	131	,,	125
1922	·74	190	,,	200	1933	·43	110	,,	125
					1934	·39	100	,,	125

The cost of firewood has also gone up. No accurate figures for the various years were available but oral inquiry showed that *Babul-wood* (generally used as fuel) was sold at the rate of 20 *panseries* (2½ maunds) for a rupee in pre-war days. The post-war rate for the same kind of wood was 10 *panseries* (1¼ maund) for a rupee. Thus we find the rate doubled and hence the Index No. for the post-war period was taken to be 200. In 1935, the rate for the same quality of wood was 16 *panseries* (2 maunds) with an Index number of 125.

An analysis of all the budgets showed that the total expenditure under light and fuel in the different income grades varied from 5.12 to 6.82 per cent. of their total income.

The following table shows percentage of expenditure under light and fuel for each grade:—

Grade I: 5.12 ; Grade II: 5.63 ; Grade III: 6.42 ; Grade IV: 6.82.

The weight for light and fuel for all grades would be:—

$$[(76 \times 5·12) + (145 \times 5·63) + (390 \times 6·42) + (128 \times 0·82)] \div 729 = 6·2$$

Of this about 75% is spent on fuel and the remaining 25% on light.

Table 9 gives the weighted indices for light (kerosine oil) and fuel (firewood) during the whole period.

TABLE 9. WEIGHTED INDICES FOR LIGHT (KEROSENE OIL) AND FUEL (FIREWOOD).

Articles	Kerosene Oil		Firewood			
Weight	4·65		1·55		Total of cols. 2 & 4	Weighted Index No.
Year	Index No.	Weighted Product	Index No.	Weighted Product		
	(1)	(2)	(3)	(4)	(5)	(6)
1914	103	448·25	100	155·00	643·25	104
1915	105	488·25	100	155·00	643·25	104
1916	110	511·50	100	155·00	666·50	108
1917	138	641·70	100	155·00	796·70	129
1918	154	716·10	100	155·00	871·10	141
1919	221	1027·65	200	310·00	1337·65	216
1920	179	832·35	200	310·00	1142·35	164
1921	192	802·80	200	310·00	1202·80	194
1922	190	883·50	200	310·00	1193·50	193
1923	172	799·80	200	310·00	1109·60	179
1924	164	762·60	200	310·00	1072·60	173
1925	169	785·85	200	310·00	1095·85	177
1926	167	776·55	200	310·00	1086·55	175
1927	172	799·80	200	310·00	1109·80	179
1928	146	678·90	200	310·00	988·90	160
1929	141	655·65	200	310·00	965·65	156
1930	141	655·65	125	193·75	849·40	137
1931	138	641·70	125	193·75	835·45	135
1932	131	509·15	125	193·75	792·90	128
1933	110	511·50	125	193·75	705·25	114
1934	100	465·00	125	193·75	658·75	106
1935	—	—	125	193·75	—	—

HOUSE RENT.

Cawnpore is a congested city honey-combed with *bustis* and slums. The industrialisation of the city has added much to its population. The mill authorities have put up a number of settlements for workers. But the accommodation in these settlements is not adequate, and the majority of the workers reside in the city. The rise or fall in rent has been dealt with under two heads: the rent in settlements, and the rent in the city.

Regular records of the rent paid by the workers to the mill authorities are maintained, and a comparison of the figures in different periods is possible. Rents in settlements differ with the nature and quality of quarters offered, and also on the amenities provided.

In Lalimli Woollen Mills Settlement known as MacRobertganj, the rent charged for a single room quarter in 1914 was annas ten per month. In 1920 the rent for the same quarters rose to Rs. 1/4/- per month, and in 1927 to Rs. 1/14/- per month at which figure it is still continuing. Thus taking the year 1913 or 1914 as the base the index number for rent in 1920 was 200, and in 1927 and 1929 rose to 300. Again, in Allenganj settlement, the rent in 1913 or 1914 for a single room quarter was annas eight per month; in 1920 it was Rs. 1/2/- per month, and since 1927 it has been Rs. 1/10/-

per month. With the same base year, the index number was 225 in 1920, and rose to 325 in 1927. There was no change in house rent in the settlements in recent years. To sum up, the index number for house rent in the settlements from 1920 to 1927 was 200, and since then has been maintained at about the level of 300.

In the city the rates have gone higher. For a small room for which annas eight per month were paid in pre-war days, the rent now charged is Rs. 2/- per month; the index number is thus of the order of 400. An inquiry into the number of labourers living in mill settlements, *bustis* and *hātas* reveals that in 1935 the percentage of settlement dwellers at Cawnpore was only 19, and the remaining 81 per cent. lived in the crowded *bustis* in the city. Working with these percentages, the weighted index number of house-rent at Cawnpore would be 381. It can be safely said that in the past the number of settlement dwellers was much less as the mill owners have only recently realised the need and importance of providing decent houses for their workers. Thus after 1927 the index number of house rent can be justifiably taken to be 381. It is difficult to find out the yearly variations in house rent and therefore for the period prior to 1927 the index number of the settlement *i.e.* 200 has been used as the index for the whole city. The family budgets showed the following percentage of expenditure on house rent in the different grades :—

Grade I : 7.22 ; Grade II : 8.64 ; Grade III : 9.43 ; Grade IV : 9.04.

The weighted weight for house rent for all groups will be :—

$$[(73 \times 7.22) + (145 \times 8.54) + (383 \times 9.43) + (128 \times 9.04)] \div 729 = 8.97$$

CLOTHING.

No reliable price statistics are available for all the different qualities of cloths consumed by the large mass of labourers. The price movements for imported cloths are given in Table 10.

The following table gives the percentage of expenditure on cloth in the various grades :—

Grade I : 7.07 ; Grade II : 7.20 ; Grade III : 7.61 ; Grade IV : 8.07.

The weighted weight for clothing will be :—

$$[(73 \times 0.07) + (145 \times 7.20) + (383 \times 7.61) + (128 \times 8.07)] \div 729 = 7.6$$

MISCELLANEOUS.

There are a number of miscellaneous expenses incurred by the labourers every month. Items included under this head are :—Barber, *dhobi*, sweeper, medicines, education, railway fares, tobacco, liquor toddy, *pān supāri* (betel nut), amusements, festivals, remittances abroad, interest on debt, repayment of debt, subscription etc. The most common and more or less permanent miscellaneous expenditure is on smoking and on the use of finely cut betel nuts for chewing. Tobacco leaf mixed with lime and betel nut chips is the commonest form of the use of tobacco, though indigenous smoking pipe known as *hugqa* (an Indian apparatus for smoking) and *biris* (inferior type of country made cigarettes; the tobacco leaf chips are wrapped up in a piece of dried leaf instead of paper) are fairly used. Cigarettes are less popular due to high costs. The prices and Index numbers of tobacco leaf and betel nuts are given in rupees in Table 11.

TABLE 10. PRICES AND THE INDEX NUMBERS OF PRICES OF IMPORTED AND EXPORTED CLOTH.

Year	Imported						Exported				General Index of Cloth
	Piece goods per yard in Rupees			Index Numbers of Prices			Piece goods per yard in Rupees		Index Numbers of Prices		
	Grey	White	Coloured	Grey	White	Coloured	Grey	Coloured	Grey	Coloured	
1909-13	·15	·16	·19	100	100	100	·15	·31	100	100	100
1914	·16	·18	·21	103	109	108	·16	·31	103	100	105
1915	·16	·18	·21	103	109	108	·16	·31	103	100	105
1916	·16	·17	·24	103	103	123	·14	·29	90	94	103
1917	·20	·22	·33	129	133	169	·16	·28	103	90	125
1918	·30	·28	41	194	170	210	·23	·34	148	110	166
1919	·40	·41	·52	258	248	267	·35	·48	220	155	281
1920	·42	·50	·61	271	303	318	·39	·48	252	155	259
1921	·46	·52	·71	297	315	864	·46	·54	297	174	289
1922	·86	·41	·55	282	248	282	·41	·47	265	132	236
1923	·33	·37	·52	213	224	267	·37	·46	239	148	218
1924	·30	·37	·51	194	224	262	·29	·42	187	185	200
1925	·34	·37	·49	219	224	251	·30	·40	194	129	203
1926	·31	·34	·43	200	206	221	·28	·40	181	129	187
1927	·26	·31	·38	168	188	195	·31	·38	200	133	177
1928	·24	·28	·35	155	170	179	·30	·40	194	129	163
1929	·24	·28	·34	155	170	174	·30	·37	194	119	162
1930	·23	·28	·82	148	170	164	·29	·36	187	116	157
1931	·19	·23	·28	123	139	144	·27	·35	174	113	139
1932	·16	·19	·28	103	115	118	·27	·31	174	100	122
1933	14	·18	·20	90	100	103	·27	·32	174	108	116
1934	·14	·18	·19	90	109	97	·26	·30	168	97	112
1935	—	—	—	—	—	—	—	—	—	—	—

TABLE 11. PRICES AND INDICES OF TOBACCO LEAF AND BETEL NUTS.

Year	Price		Indices			Year	Prices		Indices		
	Tobacco per Md.	Betel nuts per Cwt.	Tobacco	Betel nuts	Combined		Tobacco per Md.	Betel nuts per Cwt.	Tobacco	Betel nuts	Combined
1909	8·0	—	—	—	—	1921	16·4	15·5	162	152	138
1910	8·9	—	—	—	—	1922	10·0	18·9	188	138	166
1911	8·5	—	—	—	—	1923	16·3	14·7	161	146	154
1912	8·5	9·0	—	—	—	1924	15·0	14·5	148	147	148
1913	15·6	11·2	—	—	—	1925	18·1	16·6	180	164	173
Average	10·1	10·1	100	100	100	1926	20·4	10·9	202	107	109
						1927	21·3	21·1	211	209	210
						1928	17·3	20·0	171	198	183
1914	14·4	11·2	143	111	129	1929	18·8	17·1	186	170	179
1915	11·0	10·4	110	103	107	1930	16·0	16·7	158	165	161
1916	10·8	10·9	107	108	107						
						1931	11·9	15·9	118	157	135
1917	13·8	11·4	132	113	124	1932	6·0	13·6	68	130	95
1918	15·7	11·0	135	118	139	1933	4·9	10·6	49	105	73
1919	18·2	13·4	181	133	182	1934	5·7	8·8	56	87	70
1920	14·8	18·8	146	137	142	1935	7·6	—	76	—	76

TABLE 12.   WEIGHTED INDEX NUMBER OF COST OF LIVING.

Year	Cereals 85'8 Index No. (1)	Cereals Product of Index No. and Weight (2)	Other Articles of Food 12'9 Index No. (3)	Other Articles of Food Product of Index No. and Weight (4)	Light and Fuel 6'2 Index No. (5)	Light and Fuel Product of Index No. and Weight (6)	House Rent 8'97 Index No. (7)	House Rent Product of Index No. and Weight (8)	Clothing 7'6 Index No. (9)	Clothing Product of Index No. and Weight (10)	Miscellaneous 2'86 Index No. (11)	Miscellaneous Product of Index No. and Weight (12)	Total of Columns 2,4,6,8,10 & 12. (13)	Weighted General Cost of Living Index No. (14)
1914	128	4518·4	111	1431·9	104	682·25	200	1794·0	105	798·0	129	304·52	8190·07	125
1915	140	4042·0	104	1841·6	104	645·25	200	1794·0	105	798·0	107	252·39	9571·24	131
1916	124	4877·2	112	1444·8	108	666·50	200	1794·0	103	782·6	107	253·55	9318·83	127
1917	121	4271·3	115	1483·5	129	796·70	200	1794·0	125	950·0	124	291·05	9387·43	131
1918	149	5259·7	134	1728·6	141	871·10	200	1794·0	166	1261·6	130	327·60	11212·09	152
1919	210	7413·0	174	2244·6	216	1337·65	200	1794·0	231	1785·6	132	311·22	14855·07	203
1920	203	7165·9	187	2412·3	184	1142·35	200	1794·0	259	1963·4	142	333·29	14818·74	202
1921	209	7377·7	160	2064·0	194	1202·80	200	1794·0	289	2196·4	158	372·02	15006·02	205
1922	191	6342·8	166	2141·4	193	1193·50	200	1794·0	236	1793·6	166	392·18	14056·98	192
1923	192	5012·6	165	2129·5	179	1109·80	200	1794·0	218	1656·8	154	361·31	12066·30	165
1924	144	5083·2	166	2141·4	173	1072·60	200	1794·0	200	1520·0	148	349·58	11960·78	163
1925	168	5930·4	166	2141·4	177	1095·85	200	1794·0	203	1542·8	173	405·32	12912·77	176
1926	177	6248·1	165	2128·5	175	1086·55	200	1794·0	187	1421·2	199	471·57	13149·92	179
1927	170	6001·0	161	2076·9	179	1100·80	381	3417·57	177	1345·2	210	495·90	14446·37	197
1928	170	6001·0	156	2012·4	160	908·90	381	3417·57	165	1254·0	183	431·87	14115·24	192
1929	177	6248·1	166	2141·4	156	965·65	381	3417·57	162	1231·2	179	422·48	14125·40	197
1930	120	4447·8	167	2154·3	187	849·40	381	3417·57	157	1193·2	161	380·09	12417·30	170
1931	91	5212·3	160	2064·0	135	835·45	381	3417·57	189	1056·4	95	224·34	14125·40	143
1932	102	8600·6	118	1522·2	128	792·00	381	3417·57	122	927·2	95	224·34	10484·81	143
1933	97	3424·1	104	1341·6	114	705·25	381	3417·57	116	881·6	73	173·32	9013·44	136
1934	88	8100·4	102	1315·8	100	705·23	381	3417·57	112	851·2	70	161·09	11081·81	150
1935	100	8520·0	104	1341·6	—	—	381	3417·57	—	—	76	101·08	8399·25	(141)

COST OF LIVING INDEX FOR INDUSTRIAL LABOUR AT CAWNPORE

Chart of Index Numbers of Cost of Living in Cawnpore.

GENERAL COST OF LIVING

CLOTHING

LIGHT AND FUEL

OTHER ARTICLES OF FOOD

CEREALS
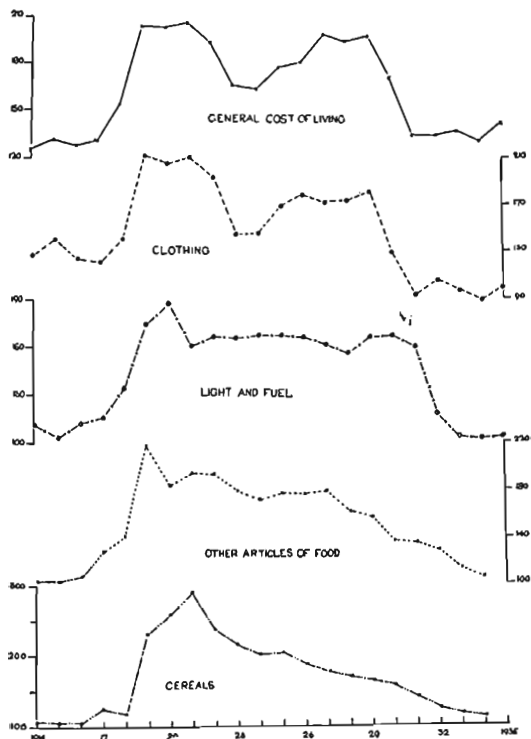
The percentage expenditure and weighted weights for tobacco and *supāri* are given below:—

$$\text{Tobacco}:-[(76 \times 1·1) + (145 \times 1·2) + (380 \times 1·2) + (128 \times 2·0)] \div 729 = 1·33$$

$$\text{Pān-Supāri}:-[(76 \times 1·4) + (145 \times 1·3) + (380 \times 0·9) + (128 \times 0·0)] \div 729 = 1·03$$

GENERAL COST OF LIVING INDEX.

We have given the weighted index numbers for the various heads for all the years. Weights were allotted to each of these heads according to their importance in a worker's budget. The weighted indices for different heads were multiplied by the weights for each head and a general weighted index number for the cost of living for all the labourers was obtained by totalling up the products of weights and weighted index numbers for each head and dividing the total by the sum of all weights.

Table 12 and the Chart show the net result of the movement of prices of various commodities consumed by the working classes. Compared to the average for five years immediately preceding the Great War, the cost of living index in 1914 went up by 25 per cent. It continued to rise slowly upto 1918. From 1919 it shot up very high and reached the maximum of 205 in 1921. It, however, fell down to 163 in 1924 after which for a period of five years ending with 1929 the rise was slow but steady. In 1929 the index number was 197. The period of depression began from this year and the cost of living index fell year after year upto 1934 when the record low figure of 130 during the last two decades was reached. In 1935, slight recovery of prices was noticed and the cost of living index rose again by 11 points.

The important years for comparison are 1914, 1921, 1929 and 1935. The rise in the cost of living index began in 1914 and reached its maximum in 1921, the total rise being 105 from the base period. From 1921 to 1929 the index number recorded a tendency to fall though the actual decrease was only 8 points, *i.e.*, from 205 to 197. During the depression period there was a record fall of 67 points from 1929 to 1934. The year 1935 showed a slight rise again by 11 points, the index figure being 141.

Though there have been two periods of fall in the cost of living indices—the one from 1921 to 1929 being a period of slight rise and slight fall, and the second from 1929 to 1934 being a period of steep fall—but the index was never lower than the average for the base period.

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