

# Kuppuswamy's Socio-Economic Status Scale - Updating for 1999 to 2018

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**Abstract:** *Socioeconomic inequalities in health status have already been established. To assess the individual's socioeconomic position within the society, a scale required. One of the useful scale is Kuppuswamy's socioeconomic status scale. However, the income variable of the scale is required to update regularly. In view of this, present article updated income ranges from 1999 to 2018 based on consumer price index for industrial worker. The procedures are simple and easy. It is recommended that the researcher may use city or state specific updated income range following the same state of the art method when conducting socio economic as well as health and nutrition survey.*

**Keywords:** Health, Kuppuswamy, Socioeconomic status, Scale, Urban

Socioeconomic inequalities in health status have already been established. Apart from this it is also an indicator of utilization of existing health care facilities. Hence, there is need of a proper scale to classify the family and individual's socio-economic status (SES) within the society. Many scholars in India have been proposed several methods or scales for classifying different population of the society by SES (1-8). One of the most popular and widely useful SES scale for social science research is Kuppuswamy's socio-economic status scale. It was first proposed by Kuppuswamy (6) for the year 1976 (table 1). This scale is considered three components as education, occupation and monthly family income to categorize an individual or family into low, middle and high SES. Of the three components education and occupation of the head of the household do not change frequently. However, due to steady inflation and depreciation of the value of Indian rupees, income of the family changes rapidly. Therefore, there is felt need constant modification of the scale with monthly family income ranges (9). In view of the above updating for previous and current year income ranges has been made to help the research community in formulating their income variable for completed and ongoing research. Since, income ranges are considered to be suitable only for the period under study (10).

The first modification has been done by Mishra & Singh (10) for 1998 using base year 1982 consumer price index for Industrial worker (CPI-IW). Year wise average all India CPI-IW reference indexes were presented in table 2. Following Mishra & Singh (10), we first calculate the conversation factor between the price index of 1976 and 1982. Then we exercise to know the price level increase in 1999, the price index by then conversation factor (price index of 1976 divided by price index 1982 in percent) was divided. Thus, multiplication factor was obtained for the year 1999. The new income range was generated for the year 1999, multiplying the original income ranges of 1976 by multiplication factor (7.0). A similar method was performed for subsequent years till 2005. The detail calculation is as under:

CPI-IW by for 1976 = 296

CPI-IW by an old base for 1976 was 296 = 100

CPI-IW by a new base for 1982 was: 490

Conversion factor for 1976 was calculated as:  $100 \times 296 \div 490 = 60.41$ .

Multiplication factor for 1999 was:  $424/60.41 = 7.0$

Updated income ranges for 1999 was: original (1976) income ranges  $\times 7.0$

In 2001, the base year has been changed. A new price index has been provided by Labour Bureau (<http://labourbureau.nic.in/indexes.htm> – Labour Bureau, Government of India) from 2006 onwards considering 2001 as the new base (table 2). To obtain the multiplication factor for the year 2006 onwards, firstly we have to multiply CPI-IW by linking factor between two base years. The linking factor between 1982 and 2001 is 4.63. Then the price index will be converted from new base (2001) to old base (1982) by multiplying 4.63. For example, 2006 CPI-IW was 123 (2001 new base), it will be converted to 1982 base by multiplying linking factor (4.63). It is noted that price levels has been increased from 1976, and a multiplying factor for increment can be obtained by multiplying the price index of the year 2006 by the conversation factor (60.41). The calculation for 2006 onwards is as follows:

CPI-IW by a new base for 2006 was 123. (2001)

CPI-IW by an old base for 1982 was:  $123 \times 4.63 = 569$ .

Multiplication factor for 2006 was calculated as:  $569/60.41 = 9.42$ .

Updated income ranges for 2006 was: 1976 income ranges  $\times 9.42$

Many scholars have been updated (post Mishra) Kuppuswamy's SES scale for the particular month of the year (11-16). This article first time updating income ranges of Kuppuswamy's SES scale based on average CPI-IW from 1999 to 2018 (296, average of month June and July). An updated income range from 1999 to 2018 was generated by multiplying original (1976) family income ranges by the multiplication factor of the respective year (Table - 3). The uniqueness of this article is that the researcher from many discipline may access, updated income ranges of Kuppuswamy's SES scale both previous and current year in

a single place. They will be generated updated income range for their upcoming research using the same state of the art method independently. Furthermore, it is recommended that the researcher may use city or state specific updated income ranges when conducting socio economic as well as health and nutrition survey.

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**Table 1: Kuppuswamy's socioeconomic status scale (urban) for 1976**

(A)	Education	Score
(I)	Profession or honours	7
(II)	Graduate or postgraduate	6
(III)	Intermediate or post high school diploma	5
(IV)	High school certificate	4
(V)	Middle school certificate	3
(VI)	Primary school certificate	2
(VII)	Illiterate	1
(B)	Occupation	Score
(I)	Profession	10
(II)	Semi-Profession	6
(III)	Clerical, Shop-owner, Farmer	5
(IV)	Skilled worker	4
(V)	Semi-skilled worker	3
(VI)	Unskilled worker	2
(VII)	Unemployed	1
(C)	Family income per month (Rs.)	Score
(I)	≥2000	12
(II)	1000-1999	10
(III)	750-999	6
(IV)	500-749	4
(V)	300-499	3
(VI)	101-299	2
(VII)	≤100	1
Socio Economic Class		Total Score
(I)	Upper	26-29
(II)	Upper Middle	Middle 16-25
(III)	Lower middle	11-15
(IV)	Upper lower	Lower 5-10
(V)	Lower	<5

**Table 2: Reference Index of CPI-IW and Conversion factor**

Year	All India CPI-IW Reference index	Conversion & multiplication factor
1960	100 – (base)	
1976	296	60.41
1982	490 – 100 (new base)	
1998	405	6.70
1999	424	7.02
2000	441	7.30
2001	458 – 100 (new base)	7.58
2002	477	7.89
2003	496	8.21
2004	514	8.51
2005	536	8.87
2006	123 – (2001 base) (linking factor = 4.63)	9.42 (123×4.63/60.41)
2007	131	10.01
2008	142	10.86
2009	157	12.03
2010	176	13.49
2011	192	14.68
2012	209	16.04
2013	232	17.79
2014	247	18.92
2015	261	20.00
2016	274	21.00
2017	281	21.60
2018	296	22.69

**Table 3:** Kuppaswamy's SES Scale: updated for monthly family income ranges from 1999 to 2018

Year	Updated year wise family income ranges* with corresponding scores						
	1	2	3	4	6	10	12
1998**	≤675	676-2024	2025-3374	3375-5049	5050-6749	6750-13499	≥13500
1999	≤700	701-2104	2105-3509	3510-5264	5265-7019	7020-14039	≥14040
2000	≤730	731-2189	2190-3649	3650-5474	5475-7299	7300-14599	≥14600
2001	≤755	756-2269	2270-3789	3790-5684	5685-7579	7580-15159	≥15160
2002	≤790	791-2369	2370-3949	3950-5924	5925-7899	7900-15799	≥15800
2003	≤820	821-2459	2460-4104	4105-6154	6155-8209	8210-16419	≥16420
2004	≤850	851-2549	2550-4254	4255-6379	6380-8509	8510-17019	≥17020
2005	≤885	886-2659	2660-4434	4435-6649	6650-8869	8870-17739	≥17740
2006	≤940	941-2824	2825-4709	4710-7064	7065-9419	9420-18839	≥18840
2007	≤1000	1001-2999	3000-5004	5005-7504	7505-10009	10010-20019	≥20020
2008	≤1085	1086-3254	3255-5429	5430-8144	8145-10859	10860-21719	≥21720
2009	≤1200	1201-3604	3605-6014	6015-9019	9020-12029	12030-24059	≥24060
2010	≤1345	1346-4044	4045-6744	6745-10114	10115-13489	13490-26979	≥26980
2011	≤1465	1466-4399	4400-7339	7340-11009	11010-14679	14680-29359	≥29360
2012	≤1605	1606-4809	4810-8019	8020-12029	12030-16039	16040-32079	≥32080
2013	≤1780	1781-5339	5340-8899	8900-13349	13350-17799	17800-35599	≥35600
2014	≤1890	1891-5674	5675-9459	9460-14189	14190-18919	18920-37839	≥37840
2015	≤2000	2001-5999	6000-9999	10000-14999	15000-19999	20000-39999	≥40000
2016	≤2100	2101-6299	6300-10499	10500-15749	15750-20999	21000-41999	≥42000
2017	≤2160	2161-6479	6480-10799	10800-16199	16200-21599	21600-43199	≥43200
2018	≤2270	2271-6809	6810-11349	11350-17024	17025-22699	22700-45399	≥45400

\* Values are rounded off. \*\*Adopted from Mishra & Singh 2003.