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## Modification of Kuppuswamy's Socioeconomic Status Scale in context to Nepal

Assessment of socioeconomic status (SES) is an important aspect in community based studies. Evaluation of SES of a family would mean the categorization of the family in respect of defined variables such as, education, occupation, economic status, physical assets, social position etc. Some of these variables can be evaluated simultaneously. Several methods or scales have been proposed for classifying different populations by socioeconomic status: Rahudkar scale 1960, Udai Parikh scale 1964, Jalota Scale 1970, Kulshrestha scale 1972, Kuppuswamy scale 1976, Shrivastava scale 1978, Bharadwaj scale 2001(1-7). However, social transformation and fast growing economy have rendered these scales ineffective in measuring the SES over the years. Further, steady inflation and consequent fall in the value of currency make the economic criteria in the scale less relevant. The most widely accepted scale for urban populations has been proposed by Kuppuswamy in India in 1976 (*Table I*). A method has recently been suggested for updating the Kuppuswamy scale(8). Presently, there is no standardized questionnaire to assess the SES of Nepalese people. We herein propose a modification to the Kuppuswamy's scale for use in Nepal, which takes into account the current national price indices of Nepal.

In the modified scale, the educational and

**TABLE I** SOCIOECONOMIC STATUS SCALE OF KUPUSWAMY (URBAN, 1976)

Score Card		Score
<i>Education</i>		
Professional or Honours		7
Graduate or Post-Graduate		6
Intermediate or Post-High-School Diploma		5
High School Certificate		4
Middle School Certificate		3
Primary School or Literate		2
Illiterate		1
<i>Occupation</i>		
		Score
Profession		10
Semi-Profession		6
Clerical, Shop-owner, Farmer		5
Skilled worker		4
Semi-skilled worker		3
Unskilled worker		2
Unemployed		1
<i>Family Income Per Month (in Rs)*</i>		
		Score
≥2000		12
1000 – 1999		10
750 – 999		6
500 – 749		4
300 – 499		3
101 – 299		2
≤100		1
<b>Total Score</b>		<b>Socioeconomic Class</b>
26 – 29	Upper (I)	
16 – 25	Middle	Upper Middle (II)
11 – 15		Lower Middle (III)
5 – 10	Lower	Upper Lower (IV)
< 5		Lower (V)

Reproduced from reference 5; \*Indian rupees.

**TABLE II** MODIFIED FAMILY INCOME GROUPS IN NEPALESE RUPEES OF THE KUPPUSWAMY'S SOCIOECONOMIC STATUS SCALE (MODIFIED FOR 2009)

Family income per month		
Original*	Modified <sup>#</sup>	Score
≥2000	≥45751	12
1000 – 1999	22851 – 45750	10
750 – 999	17151 – 22850	6
500 – 749	11451 – 17150	4
300 – 499	6851 – 11450	3
101 – 299	2301 – 6850	2
≤100	≤2300	1

\* In Indian rupees: <sup>#</sup>rounded off to nearest 50 in NPR.

occupational criteria remain the same because of similar educational and occupational milieu in India and Nepal. To modify the economic criteria, initially the family income per month of each group, which is stated in Indian Rupees (INR) in the original scale, is converted to Nepalese Rupees (NPR) by multiplying with 1.6 (INR 100 is equivalent to NPR 160). In addition, the National Urban Consumer Price Index (NUCPI) for Nepal is noted for the current year (from the website of Nepal Rastra Bank, Nepal)(9). The conversion factor between the NUCPI for 1976 (the year when Kuppuswamy's scale was proposed) and the current year is then determined, as follows:

NUCPI for 1976 = 15.6 (Base Year: 1995 / 96 = 100)

NUCPI for 2009 = 223.1 (Base Year: 1995 / 96 = 100)

To determine the conversion factor between the index of 1976 and 2009:  $223.1 \div 15.6 = 14.3$ .

Subsequently, all the income groups in the new scale are multiplied with the conversion factor to get the appropriate income groups (**Table II**). As this scale was initially proposed in 1976 in India, it's updating in 2009 in context to Nepal has certain limitations. However, this modified scale can be administered very quickly in any setting for large community surveys as well as small scale studies, and it has provision of updating the scale over the

years to maintain its high validity. This will make the scale relevant and useful and also allow individual researchers to modify it according to the period of their research.

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