

Modification of Kuppuswamy’s Socioeconomic Status Scale in the Context of Nepal, 2019

Joshi SK, Acharya K

Assessment of socioeconomic status (SES) of the individual and family is an important aspect of public health research. There is no standardized scale to assess the SES of the Nepalese population. The National Planning Commission of Nepal has developed a multidimensional poverty index (MPI) in 2018.¹ MPI deals with the different dimensions of poverty such as health, education, and living standard. There are different indicators of the above-noted dimensions with the deprivation cut off values. Nepal Rastra Bank doesn’t publish consumer price index of rural and urban areas separately, instead, it publishes an index of Kathmandu Valley, Terai and hilly region separately. Terai and hilly regions consist of both rural and urban areas while Kathmandu valley consists of only urban areas. MPI gives a good overview of the multidimensional poverty indicators but does not explain the socioeconomic status.

A number of scales are recommended for classifying SES in India. They are also being used in Nepal due to similarities in many socioeconomic characteristics between the two countries. Commonly used socioeconomic scales in India are Rahudkar (1960), B G. Prasad (1961), Udai Parikh (1964), Jalota (1970), Kulshrestha (1972), Kuppuswamy (1976), Srivastava (1978), and Bhardwaj (2001).²⁻⁹ Among them, Kuppuswamy’s scale is commonly used in the Nepalese context and the three aspects of Kuppuswamy’s scale are education, occupation of the head of the family, and total monthly family income. However, the latest modification of Kuppuswamy’s scale in context to Nepal was done in 2009.¹⁰ Since then, there has been no modification of that scale and all the researchers are obliged to use the modification that was done ten years back. The Constitution of Nepal (2015) has declared the country as the Federal Democratic Republic with 753 local levels out of which 293 (276 Municipalities, 11 Sub-metropolises, and 6 Metropolises) have been classified as urban areas. The preliminary estimate of GDP per capita at current price stands at NRs. 103,335 (US\$ 1004) for the fiscal year 2017/18.¹¹ There has been a significant growth in the consumer price index since 2009.

It is very essential therefore to modify this scale, taking into account the current national price indices of Nepal. We have modified the Kuppuswamy scale from 1976 (Table 1) in the context of Nepal in which the educational and occupational criteria however remain the same. We have updated the economic criteria by using the latest national consumer price index of Kathmandu Valley (NCPI) provided by the Nepal Rastra Bank.¹² Firstly, the family income stated in Indian rupees (INR) in original scale is converted to Nepalese rupees by multiplying with 1.6 (INR 100 = 160 NR) and the conversion factor between NCPI for 1976 (Kuppuswamy’s scale was proposed in 1976) and NCPI 2018 has been determined.

Table 1. Kuppuswamy’s socioeconomic scale. (Urban 1976)⁷

Score		Family income per month(in INR)	
Education			
Professional or Honors	7	≥ 2000	12
Graduate or Post graduate	6	1000-1999	10
Intermediate of Post high school diploma	5	750-999	6
High school certificate	4	500-749	4
Middle school certificate	3	300-499	3
Primary School or Literate	2	101-299	2
Illiterate	1	≤ 100	1
Occupation		Total score	Socioeconomic class
Profession	10	26-29	Upper (I)
Semi-profession	6	16-25	Mid- dle Upper Middle (II)
Clerical, shop owner, Farmer	5	11-15	Lower Middle (III)
Skilled worker	4	5-10	Lower Upper Lower (IV)
Semi-skilled worker	3	<5	Lower (V)
Unskilled worker	2		
Unemployment	1		

Table 2. Modified Family Income Group in Nepalese Rupees of the Kuppuswamy's Socioeconomic Scale for 2019

Original (in INR)	Modified (in NPR)	Score
≥ 2000	≥ 97451	12
1000-1999	48751-97450	10
750-999	36551-48750	6
500-749	24351-36550	4
300-499	14551-24350	3
101-299	4851- 14550	2
≤ 100	≤ 4850	1

Taking base year 2014/15 =100, NCPI for Kathmandu valley in 1976 was 3.9 and in 2018, it was 118.8. So the conversion factor is $118.8/3.9=30.46$. All the income groups in the initial scale were multiplied by 30.46 to get modified groups of total family income which is rounded off to nearest 50. (Table 2)

This modification has certain limitations. Although the economic criteria have been updated, no update has been done in education and occupational criteria. The authors plan to work on the education and occupational criteria based on the essential information and update the criteria later. However, this modified Kuppuswamy's scale 2019 will be useful to be applied in any public health research being conducted in Nepal.

Department of Community Medicine,
Kathmandu Medical College, Sinamangal, Kathmandu
Email: drsunilkumarjoshi@gmail.com

REFERENCES

1. The government of Nepal. National Planning Commission. Multidimensional Poverty Index 2018, Kathmandu, Nepal. available from https://www.npc.gov.np/images/category/Nepal_MPI.pdf
2. Rahudkar WB. A scale for measuring socioeconomic status of Indian farm families. *Nay Agril Coll Mag.* 1960; 34.
3. Prasad BG. Social Classification of Indian families. *J Indian Med Assoc.* 1961; 37:250-1.
4. Parikh U, Trivedi G. Manual of socio-economic status scale (Rural), Manasayan, Delhi, 1964.
5. Jalota S, Pandey RN, Kapoor SD, Singh RN. Socioeconomic status scale questionnaire (Urban), Psycho-Centre, New Delhi, 1970.
6. Kulshrestha SP, Day P. Socio-economic status scale (Urban) form-A, National Psychological Corporation, Agra, 1972.
7. Kuppuswamy B. Manual of Socioeconomic Status (urban), Manasayan, Delhi, 1981.
8. Srivastava GP. Socio-economic status scale (Urban), National Psychological Corporation, Agra, 1978.
9. Bhardwaj RL. Manual for socio-economic status scale. National Psychological Corporation, Agra, 2001.
10. Ghosh A, Ghosh T. Modification of Kuppuswamy's Socioeconomic Status Scale in context to Nepal. *Indian Pediatrics.* 2009;46(12):1104-5.
11. Central Bureau of statistics. Nepal in figures, 2018. Kathmandu, Nepal. Available from: <https://cbs.gov.np/wp-content/uploads/2019/02/Nepal-in-Figures-2018.pdf>
12. Nepal Rastra Bank. Quarterly Economic Bulletin. Mid October 2018. Kathmandu, Nepal. Available from [https://www.nrb.org.np/red/publications/economic_bulletin/Quarterly_Economic_Bulletin--2018-10_\(Mid_October\)-new.pdf](https://www.nrb.org.np/red/publications/economic_bulletin/Quarterly_Economic_Bulletin--2018-10_(Mid_October)-new.pdf)