

Amartya K. Sen



Professor Amartya K. Sen has been awarded the 1998 Nobel Prize in Economic Sciences for his contributions to Welfare Economics. Professor Sen's contributions have been very substantive to all the areas he has touched upon, some of them are highly technical. But from the very beginning his major concern was the welfare of people, especially the poor.

Professor Sen was born in Santiniketan, India, on 3 November 1933. He began his high-school education at St. Gregory's School, Dhaka, in 1941. His father Ashutosh Sen used to teach Chemistry at Dhaka University. Professor Sen received a B.A. in Economics with a minor in Mathematics in 1953 from Presidency College, Kolkata. At Trinity College in Cambridge, he received a second B.A. in Economics in 1956 and then a Ph.D. in 1959. Professor Sen has taught Economics at a long list of universities—Jadavpur University, Kolkata, Cambridge University, University of Delhi, London School of Economics, Oxford University and Harvard University. He has also served as a visiting Professor at Cornell, University of California at Berkeley, Stanford and MIT.

Professor Sen raised basic questions about welfare theories and how market prices can be taken as reflections of welfare indicators. He chose a path of research which is different from market failures, co-ordination problems and asymmetric information. He was looking for methods of aggregating the values individuals in a society attach to different alternatives into values for the society as a whole. In the early 1950s problems associated with social choice motivated Professor Kenneth J. Arrow, who shared the 1972 Nobel Prize in Economic Sciences with Professor J. R. Hicks, to examine the possibility of aggregating individual preferences into a social preference. He proved that a collective choice rule will inevitably conflict with some basic democratic norm. This strong negative result, which is popularly known as Arrow's Impossibility Theorem, casts doubts on all claims that there can be a 'will of the people', a 'social contract', a 'public good', a social benefit, a 'people's voice' and so on. That is, it casts much doubt on all notions that explicitly or implicitly attribute preferences to the society. Professor Sen's contribution to the literature was to show under what conditions Arrow's Impossibility Theorem would indeed come to pass as well as to extend and enrich the theory of social choice. Later research on collective choice theory relies to a large extent on Professor Sen's taxonomy of information on measurability and comparability of individual preferences. Investigations proceeded along the line how could individual preferences be aggregated and different social states evaluated in a satisfactory manner.

The constructive possibilities that the new directions of research on social choice theory produced led Professor Sen to make use of available statistics for a variety of economic and social appraisals: measurement of economic inequality, judgment of poverty, evaluation of projects, analysis of unemployment, investigation of the principles and implications of liberty and rights, assessment of gender inequality, evaluation of real national

income and so on. With Professors Partha Dasgupta and David Starrett, he showed how to make cross-population comparison of income inequality using welfare theoretic approaches. He devised methods of measuring poverty that yielded useful information for improving economic conditions of the poor.

Professor Sen argued that neither the utility nor the opulence approach comes close to the issue of measuring the standard of living. Instead, he proposed a capability- functioning approach to the measurement of living standard, where functionings refer to the various things a person value doing (or being) and capability is the ability to achieve. Functionings may vary from such elementary ones as adequate nourishment and literacy to very complex activities like participation in social gatherings. The living standard is determined by the opportunity set of basic capabilities to function. He further argued that the freedom to choose from the opportunity set is an important ingredient of the standard of living. From this perspective poverty is a problem of capability failure.

Building on ideas put forward by Professor Sen, UNDP suggested the human development index, which can be regarded as an index of well-being in terms of functioning achievements. It aggregates the functioning levels of three attributes: life expectancy, per capita real GDP and educational attainment rate. He also analyzed famines with his theoretical approach to welfare measurement. He argued that famines can occur even when the supply of food is not significantly lower. In his view, lack of opportunities and capabilities are responsible for poverty and famines.

Another important aspect which he investigated in details is gender inequality. He established that in countries like India, unequal distribution of food entitlement among the male and female members of a family may cause malnutrition of the female members which in turn affects their health and longevity. Existence of high inequality in educational attainment rate between males and females demonstrates another dimension of gender bias.

In addition to the Nobel Prize, Professor Sen has received several other awards including Mahalanobis Memorial Prize (Indian Econometric Society, 1974), Indira Gandhi Gold Medal (Asiatic Society, 1994), Bharat Ratna (the highest Civilian Award in India, 1999), Companion of Honor (UK, 2000), Eisenhower Medal (USA, 2000), International Humanist Award (International Humanist and Ethical Union, 2002) and Lifetime Achievement Award (Indian Chamber of Commerce, 2003).

Professor Sen delivered the convocation address 'Dimensions of Unemployment in India' at the Indian Statistical Institute, Kolkata, on 31 December 1973.

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