

Deaton, the Development Economist

M. H. Suryanarayana

Angus Deaton's contributions to economics have been seminal providing development economists with new tools of analysis that have yielded policy-altering insights.

“Deaton is a towering personality! You will not miss him”. This was my introduction to Professor Angus Deaton from Professor Nicholas Stern. We, the research scholars of the Economic Analysis Unit at the Indian Statistical Institute Bangalore Centre, were debating about how to identify Angus Deaton when we went to receive him at the Bangalore airport. This was way back in the early 1980s and we were preparing for the Golden Jubilee Celebrations of the Indian Statistical Institute where Angus was a key speaker. Since then, going by his seminal contributions to empirical economic analysis, consumer welfare and poverty in particular and my own personal interactions with him at different stages of my academic career, I have realised that Stern's observations would hold equally well for Deaton, the academician. The Royal Swedish Academy of Sciences has only confirmed this by awarding him the Nobel Memorial prize in economics for “his analysis of consumption, poverty and welfare”.

Given my interests in consumer welfare, poverty and food insecurity, I have been an avid reader of Deaton's contributions on these issues and benefited considerably by using concepts/specifications/tools proposed by him in my academic research. One such area is consumer demand modelling addressing how an individual household allocates its limited income among competing goods and services so as to maximise welfare. In this pursuit, my preliminary introduction to the subject came from Deaton's survey of models of consumer behavior.¹ I got a comprehensive understanding of the foundations of consumer behaviour analysis reading his *Economics and Consumer Behaviour*.² Finally, I found solutions to most problems in the empirical application of conventional models in Deaton's *Almost Ideal Demand System*.³ We have found this specification quite useful in addressing issues related to demand for textiles in India and exploring the potential scope for different policy options.⁴

A problem that researchers in developing countries like India, in particular, face is inadequate information on prices. This is a major constraint in measuring household demand responses to changes in prices. Deaton developed a novel way of computing a measure of such response called price elasticity of demand from observed spatial variation. He applied this method to the Indian National Survey data on household consumption distribution in Maharashtra.⁵ He examined the food demand patterns, which threw up useful insights into pricing policy options.

M H Suryanarayana is with the Indira Gandhi Institute of Development Studies, Mumbai, India. He can be reached at surya.igidr@gmail.com.

Improving the nutritional status of the population is a major policy challenge for the developing countries. In a study on rural Maharashtra, Deaton examined how nutrition responds to changes in income.⁶ He examined if nutrition is constrained by income and found that the elasticity calorie intake with respect to total expenditure is 0.3-0.5. Citing the evidence that with less than five per cent of the daily wage, one could buy the calorie required for a day's activity, he challenges the hypothesis that "income is constrained by nutrition rather than the other way round".

Gender discrimination is an issue that has received considerable academic attention while explaining the observed high female infant mortality rates in parts of India. Where is the evidence? How do we measure and interpret? What are the policy options? This is a critical issue in development policy formulation because if there is discrimination based on gender in allocating consumption goods within a household, it becomes a matter of policy concern to improve such allocations. Conventional policy options like food pricing or food-for-work programmes would not realise the chosen objectives. Alternative options could be supplementary school-feeding programmes or infant care and education programmes. How does one really verify the existence of such discrimination in consumption allocation? Of course, one does not observe and collect information on consumption patterns of individuals who constitute a household. But, any gender based allocation would get reflected in the relationship between gender composition and aggregate consumption pattern. In a novel paper on 'Gender Effects of Indian Consumption Patterns', Deaton has explored methodological options and empirical evidence on the issue.⁷

Measurement of poverty is another area where Deaton's contribution is quite widely acknowledged, in India in particular.⁸ Deaton has documented the status of deprivation in India quite meticulously.⁹ He has shown that the state of nutrition has improved in India but still has a long way to go. He has shown that malnutrition is not simply a matter of inadequate calories but involved limited diet diversity, that is, inadequate consumption of non-cereal items like leafy vegetables, eggs and fruit.¹⁰ Eradicating deprivation also called for improving sanitation, taking care of health of pregnant women and improving infant and maternal health services.

In sum, this is a well-deserved award for Deaton, the Development Economist.

For a short selection of Angus Deaton's work see http://esocialsciences.org/Authors/Angus_Deaton.aspx.

¹ Brown, Alan and Angus Deaton (1972): 'Surveys in Applied Economics: Models of Consumer Behaviour', *The Economic Journal*, Vol. 82, No. 328, pp. 1145-1236.

² Deaton, Angus and John Muellbauer (1980): *Economics and Consumer Behaviour*, Cambridge University Press, Cambridge.

³ Deaton, Angus and John Muellbauer (1980): 'An Almost Ideal Demand System', *The American Economic Review*, Vol. 70, No. 3, pp. 312-326.

⁴ Suryanarayana, M.H., Tirthankar Roy and Kirit S. Parikh (1993): 'Growth, Distribution and Demand for Textiles in India', *Journal of Quantitative Economics*, Vol. 9, No.2, pp. 263-280

⁵ Deaton, Angus, Kirit Parikh and Shankar Subramanian (1994): 'Food Demand Pattern and Pricing Policy in Maharashtra: An Analysis Using Household Level Survey Data', *Sarvekshana*, Vol. 17, No. 4, pp. 11-34.

⁶ Subramanian, Shankar and Angus Deaton (1996): 'The Demand for Food and Calories', *The Journal of Political Economy*, Vol. 104, No. 1, pp. 133-162.

⁷ Subramanian, Shankar and Angus Deaton (1991): 'Gender Effects in Indian Consumption Patterns', *Sarvekshana*, Vol. XIV, No. 4, pp. 1-12.

⁸ Deaton, Angus and Valerie Kozel (eds.) (2005): *The Great Indian Poverty Debate*, Macmillan India, New Delhi.

⁹ Deaton, Angus and Jean Dreze (2002): 'Poverty and Inequality in India: A Re-Examination', *Economic and Political Weekly*, Vol. XXXVII, No. 36, pp. 3729-3748.

¹⁰ Deaton, Angus and Jean Dreze (2007): 'Food and Nutrition in India: Facts and Interpretations', *Economic and Political Weekly*, Vol. XLIV, No. 7, pp. 42-65.