

A NOTE ON PROFESSOR MUSGRAVE'S DIAGRAMMATIC EXPLANATION OF TAX LIABILITIES UNDER VARIOUS SACRIFICE FORMULAS— COMMENTS AND RESTATEMENT

(A) INCOME, UTILITY & PRINCIPLES OF TAXATION—A Note
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IN his note on "Musgrave's Diagrammatic Explanation of Tax Liabilities Under Various Sacrifice Formulas", published in *Artha Vijnana*, Vol. XV, No. 4, Dec. 1973, Shri G. Thimmaiah showed an inconsistency in the relationship between utility and income implied in the diagram used by Musgrave and suggested modifications to remove the inconsistency.

Two objections were raised by Thimmaiah. Firstly, Musgrave has shown zero level of total utility associated with subsistence level of income, which is positive. Thimmaiah argues that the positive level of income must be associated with positive total utility. The objection is valid and cannot be contested. The second objection is that Musgrave has left the subsistence income undefined. To support his contention Thimmaiah states that the progression in the distribution of tax burden under equal marginal sacrifice formula in such a way as to minimise the aggregate sacrifice of the community and equalise marginal sacrifices of different individuals has been attempted to be achieved keeping in view the subsistence level of income and its total and marginal utilities. Further, he continues, for the purpose of establishing a theoretical basis of determining the exemption limit under progressive taxation, the behaviour of total utility and marginal utility of income below the subsistence level has to be defined. Otherwise, theoretically there is no way of finding out what is subsistence level.

It is at this juncture that Thimmaiah appears to be confused and becomes the prisoner of his own words. In order to make out a case for defining subsistence income he writes, "The marginal utilities of individuals have been attempted to be equalised under equal marginal sacrifice formula by first taxing the highest level of income and thus reducing the income utility of the highest income recipients and then taxing the next highest level and so on depending on the revenue requirements of the Government. Thus marginal utilities of different individuals are attempted to be equalised by reducing the total income