

## A NOTE ON FELDMAN'S PLANNING MODEL

K. K. UPADHYAYA

### *The Problem*

G. A. Feldman's model (1928) was framed to help tackling the key problem facing Soviet planners on the eve of the launching of their First Five-Year Plan (1928-33). After rounds of wholesale nationalization beginning in 1918 under 'war communism' and de-nationalization under new economic policy (1920-28) and disenchantment with a single-sector approach on planning, the Goelro, a multi-sector approach was being broached. But a lively debate was going on as to how to allocate investment into various sectors and most importantly into the two Marxian categories of capital goods and consumer goods industries.

One view was that it be decided by a set of equations giving technical coefficients of production of various segments of industry with arrangement to show changes in them over time. The other view was that this be left to technicians. While the methodology was ultimately developed largely by Groman and Bazarov, Feldman's model<sup>1</sup> provided a strong scaffolding to it.

### *The Solution*

The model helped tracing the impact of all possible allocations of investment between capital and consumer goods industries on national income investment and consumption at various points of time. It showed that as the investment allocation ratio of capital goods sector approached one, consumption would register no growth while investment and income will increase at the maximum possible rate. And as the ratio approaches zero, consumption will increase at the maximum possible rate but there will be no further increase in the rate of growth of investment and income. It thus formalized an important view on growth-process : a closed economy cannot increase its investment unless the output of capital goods is increased. (The other view is that ability to save is important.<sup>2</sup>)

The choice of allocation ratio will depend on the objective function before the planners: whether it is to maximise consumption at the

<sup>1</sup> Planovoe Khoziaistvo, 1928, No. 11; 1929, No. 12.

<sup>2</sup> The first view is the Stakhnovite view on economic development with stress on heavy industry, and the other view is the typical Keynesian view. See E. Domar, "A Soviet Model of Growth", in *Essays in Economic Growth*, p. 236.