

## THE THREEFOLD SEQUENCE OF PERCEPTIONS OF THE CHOICE OF DEVELOPMENT STRATEGIES FOR THE RURAL POPULATIONS OF THIRD WORLD COUNTRIES

Sinan DEMİRDÖĞEN \*

The postwar period has witnessed a sequence of consensuses on alternative development strategies for the rural parts of Third World countries. Changes in perceptions of the choice of the strategies over the last three decades are mainly due to set-backs in the adoption of early strategies and the urgent requirement to meet the basic needs of the rural populations. Objectives of the strategies have been so altered that rural people have themselves become a target in planning rather than an object in an aggregate sectoral planning strategy while emphasis has shifted from growth in gross national product (GNP) per se to increase in the welfare and economic productivity in the rural areas.

### Growth First

Early beliefs of economic planners were that economic development was equivalent to rapid growth in output; and, thus emphasis should be given to the development of a modern, capital intensive nonagricultural sector. The predicament of agriculture within that framework was viewed to be a lack of demand for its production. Stimulation of agricultural production was linked to increases in the demand for agricultural products, which could be brought about by nonagricultural income increases. It later became clear that suffering from serious bottlenecks on the supply side, agriculture was not able to meet the rising demand from the nonagricultural sector, even if it did respond to it. The source of the problem was considered to be lack of capital; and, finance organizations directed their funds towards large-scale and capital intensive agricultural projects (e.g. big irrigation projects and flood control works).

The focus of development plans of less developed countries (LDC's) later shifted onto agriculture from urban manufacturing sector in a climate where the classical comparative-advantage theory of trade was widely praised. At the time, the data on these countries indicated that an important proportion of money incomes was derived from exports of livestock and agricultural products. As an extreme example, in the early 1960's, 80 percent of export earnings in Tanganyika

---

(\*) Asistan, Bursa Üniversitesi, İktisadi ve Sosyal Bilimler Fakültesi.



was derived from exports of livestock and agricultural products while the money incomes accrued from livestock and agricultural production constituted 40 percent of the national total.<sup>1</sup>

LDC's were considered to have an immediate comparative advantage in the production of export cash crops rather than in heavy investments in the manufacturing sector and, therefore, protection of industry was inappropriate. Government as the basic agent of development activities, was to allocate public expenditures on a sound criterion of rate of return on investment.

A consensus was established on the leading role of agriculture in eliminating economic backwardness. However, the ultimate target of GNP increases the attainment of which would suffice for the success of economic plans was maintained. Agriculture was believed to contribute to increase the size of the internal market through increases in the marketable surplus of production in the course of trade with non-agricultural sector and thus to induce the expansion of manufacturing. Capital injection into agriculture needed to be preceded by a careful comparison of investment opportunities so that due consideration could be given to the rural setting in the Third World, where, it was argued, labor resource was abundant and the facilities and opportunities to increase the labor productivity in a limited supply of land were nonexistent. Capital investments were to be supplemented by and integrated with services extending technical knowledge and stimulating managerial ability.

The contention was that traditional methods of agricultural production in LDC's were not adequate for a strategy of continuous growth in production and thus needed to be ultimately changed. Poorly productive, the traditional methods were unlikely to give satisfactory returns to capital investment so as to initiate and sustain a drifting move in economic growth. In the long run these methods caused erosion, loss of fertility, and damage of hydrological regime. It was argued that peasants were bound by tradition, resistant to change and thus unlikely to respond to technical advice and to adopt technological innovations. Traditional village setting was viewed as the source of backwardness in production, of low standards of living with all its social, economic and cultural aspects and as a restraint on development programmes aimed at growth in GNP.

The focus of development strategies became the 'transformation' programmes, which were designed to introduce new methods of agricultural production with large - scale capital investments and central supervision. Only a short term prospect was seen in traditional peasant production; 'improvement' activities designed for traditional methods encompassed the crops and areas which promised greatest returns on capital. The improvement expected were wider use of capital, establishment of market activities, and thus increase of cash incentives to the producer. The two basic policy instruments for that were extension services and administrative prices. The ambitious 'transformation' pro-



jects with substantial fixed investment requirements meant heavy burdens on government budgets and were envisaged to be supplemented by 'improvement' activities, which were to increase government revenues as the marketable surplus of rural production increases and thus expands the taxation base. Due to the handicaps mentioned above, traditional production methods rendered 'improvement' schemes secondary to 'transformation' projects.

Transformation process was designed to be of two types: reorganization of farming in settled areas and/or settlement in new areas. The former entailed the replacement of traditional land tenure and land inheritance by a system under which each entitled individual was to obtain a consolidated holding of economic size; the provision of a farm plan with methods for soil conservation, which foresaw an improved and efficient farm system with a close supervision of the farming activity; and, the provision of loans to the project area. The latter, however, was given higher priority. The argument was that within these schemes faster progress was more likely since people, when moved to new areas, were to be more prepared for and receptive of change compared to when in their familiar environment. Settlement in new areas comprised of various projects such as supervised settlement, partnership schemes, irrigation and flood control works, where, yet again, were maintained a farm system, investments in stock and equipment, irrigation and other planned facilities, and the close supervision of farmers.<sup>2</sup>

The traditional small - holder farm system was alleged to have the following major handicaps:

- a) Primitive methods coupled with conservatism and, resistance to change;
- b) Lack of managerial ability;
- c) Limited influence of economic incentives;
- d) Limitations imposed by customary land tenure.<sup>3</sup>

Since it was assumed that the marginal productivity of labor in agriculture was zero, production was only to be increased through radical modifications in the relative levels of inputs which were complementary to labor or through the removal of the 'excess' labor force from densely populated areas. In the long run, land was a limited factor; thus, output growth was to be achieved through rising productivity in cultivated areas.

These assumptions have been attacked in various respects. First, they have been criticized for not being empirically tested.<sup>4</sup> It has been argued that in various observations small farmers have shown discrepancies in their responses towards technical advice, their attitudes towards technical innovations and their overall performances. They have responded to technical advice so long as the technical criteria have matched up with the economic. It was not completely clear that they were irrational decision makers who ignored profitability or economic efficiency in the production activity. If the particular techni-



cal advice or innovation turned out to decrease his overall returns, he became increasingly reluctant to adopt.

Secondly, the marginal productivity of labor in the agricultural sector of LDC's was not necessarily zero. It has been indicated that it may in fact be positive at all resource levels in many cases. Traditional land tenure has also been contended to have tended to adjust to changes in resource patterns, economic opportunities and to population growth and commercialization.

The observed unresponsiveness of small farmers to the previous irrigation and flood control schemes were due to a number of factors: Caution in the face of uncertainty, lack of technical knowledge and capital, the need for clearing the land before use, uncertainty of holding in the relevant area, danger of loss of holding outside, overwhelming supervision.<sup>5</sup>

Transformation programmes were started in Tanganyika (currently Tanzania) in early 1960's, (the First Five Year Plan 1964/69). They entailed new village settlements up to 250 families integrated in large irrigation projects under government control. The projects bore hopes in the sense that their success was to be built on new and improved cultivation methods, which were to encourage the producers to accept the regulations of the scheme.

The transformation schemes allegedly possessed advantages such as economies of scale; demonstration effect, which readily diffused the technically improved production methods; and other social and political implications of cooperative work and community life in addition to the advantage of high rates of return on capital.

However, it has been argued that these advantages were not realized at all. An economic analysis of optimum scale of operations, which was to compare relative input and output levels and the relevant technological relationship, was likely to render the optimum level of output to be at the point of minimum average costs when discontinuous inputs were fully utilised. Under given resource endowments, so to speak, the most efficient production methods could be those that maximise the returns to scarce resources or those that maximise the use of least cost inputs. The transformation schemes has been argued to have ignored these yardsticks or generally speaking the fact that small farmer systems of production in LDC's were more efficient than most large scale methods.<sup>6</sup> Thus, the particular technology adopted needed to be carefully selected on the grounds of efficiency such that large scale technology was not necessarily the most appropriate one. Moreover, the provision of nonagricultural activities (e.g. establishment of infrastructural services) was not only possible with large scale schemes but also with the cooperation of small farmers.

The demonstration effect expected from the projects could hardly occur because of the financial constraints and differing economic environment working on the small holders who were exposed to the inno-



vations outside the project plots. The expected social and economic benefits such as the disintegration of traditional institutions and provision of immediate health and education services did not materialise either.

### Growth and Equity

Failure of transformation schemes lent itself to a shift of emphasis towards small holder system of agricultural production. In that, there were two major considerations: Potentialities of the traditional practice and equity. The new approach was delineated by B. Johnston, J. Page, and P. Wair in 1972.

They held to a wider concept of efficiency rather than one merely entailing rate of return in money incomes. Thus, there could not be a single, static objective in strategies for the agricultural sector but an expansion path with a range of objectives suitable to the factor proportions of a developing economy. An efficient strategy was to reconcile with the following objectives:

a) Contribution to the overall rate of growth coupled with structural transformation;

b) Achievement of a satisfactory rate of increase in farm output through encouraging a sequence of innovations which were to exploit the possibilities for such technical change that were most appropriate to a country's factor endowments;

c) Social modernisation, which included lowering of birth rates, extension and improvement of rural education, and strengthening of entrepreneurial capacities, and which was to be attainable through widespread attitudinal and behavioral changes among households.

Johnston et al classified the strategies for agricultural development into two major groups: bimodal and unimodal. The bimodal strategy entailed the concentration of resources in a subsector of large and capital intensive units (e. g. transformation projects). The unimodal one, instead, foresaw a wide diffusion of technical innovations, which were to be adopted to the factor proportions of the sector as a whole and were thus highly divisible, scale neutral to a great extent and suitable for progressive adoption by small farmers. The unimodal strategy was to best satisfy the requirements mentioned above and to perform better than the bimodal one in terms of equity.

The new approach contended that efficiency and equity were reconcilable. These could be integrated in the unimodal strategy in the long run. The bimodal strategy, however, was to increase the gap between the two different types of firms (the average and frontier) as well as to misallocate the economic resources. The points in Diagrams I and II indicate different combinations of inputs used by firms, whereas the frontier isoquants represent the least quantities of inputs required per unit of output and thus the technically most efficient firms.<sup>7</sup> Price efficient firms are to be employing that combination of



inputs, which is equal to the relative prices. This position is indicated by the points of tangency between the isoquant and price lines (PP). The frontier firms are those which are the technically and price efficient; all other firms which lie further up and right of the frontier isoquants are average firms.  $F_t$  and  $A_t$  represent the frontier and average firms before the technical change respectively.  $F_{t+\Delta t}$  in Diagram II represents the frontier isoquant which is to be attained through the widespread introduction of scale neutral innovations (as in the unimodal strategy) coupled with investments in research, training and infrastructure. As small but labor intensive farms utilize these innovations, with limited quantities of purchased inputs, the average isoquant is likely to move inwards as well.

Under identical relative factor prices, the bimodal strategy involves a higher capital/labor ratio ( $K/L$ ) than the unimodal one, since easy access to land and capital renders those firms with high capital/labor ratios able to operate on the frontier isoquant and thus creates a gap between the frontier and average firms in terms of factor proportions ( $K/L$  and  $K'/L'$  respectively). Moreover, since inputs are concentrated in the capital intensive sector, the average firms are to be left with a less  $K/L$  than it would have been under a unimodal strategy (the slope of the ray  $K/L$  in Diagram I after the bimodal strategy is less than  $K/L$  in Diagram II).

The rate of diffusion of innovations and technical advice is to determine the rate at which the agricultural sector moves from the average isoquant ( $A_t$ ) towards the frontier isoquant ( $F_{t+\Delta t}$  or  $F_t + \Delta t$ ). The rate and nature of the diffusion process, however, are to be influenced by the selected strategy of the government; price distortions which undervalue capital and overvalue labor are likely to force the capital intensive farms away from the average firms in terms of factor proportions ( $K_m/L_m$  represents the mentioned divergence).

The difference between the frontier (best) and average firms in terms of factor intensities and technical efficiency is to arise also in the unimodal strategy because of the learning effect (i.e. the difference in output per unit rather than in factor intensities). However the divergence between the two types of firms are likely to increase rather than decrease in the bimodal strategy in the long run due to price distortions.

The unimodal strategy, due to its lower capital/labor ratio, is to mitigate underemployment and unemployment in the rural sector, to create a different type of demand for consumer goods, and to contribute to overall growth and structural transformation of the economy in the desired fashion. It is to stimulate the development of local manufacturing since it requires mechanical innovations of low technical sophistication and low foreign exchange content it is to consequently expand general employment and to initiate related industries.

One of the further advantages of the unimodal strategy, it was argued, is that it is designed to increase productivity with whatever is



available on the farm unit or internal to the agricultural sector. The size of cultivated land did not need to be increased with the employed technology to the contrary of the bimodal practice. Innovations, still yield-increasing as under the bimodal system, are of a complementary nature and generally based on the seed-fertiliser technology. The strategy is equally adoptable under a highly skewed land distribution pattern, since the choice of technique is related to the size distribution of operational units rather than holdings; that is to say, the advantage of making quick decisions can still be secured through widespread renting practice.

A structural change which makes possible a reduction in the absolute size of the rural population, a substantial increase in commercial demand for farm products, and rises in the capital/labor ratio in agriculture was to, according to Johnston et al, contribute to the welfare of the rural population; and the unimodal strategy was believed, for these reasons, to secure that in the long run. It was also to affect social modernisation favorably since it was to create a favorable environment for the training and recruitment of entrepreneurs, generation of support for rural education, and birth control. Johnston et al indicated two policies for the unimodal strategy to be adopted: increases in land taxes and the imposition of excise taxes on labor-saving farm inputs.

### **Poverty: A Matter of Urgency**

The third step in the sequence of changing perceptions of the choice of development strategies has involved a shift of targets from overall output increase towards the income and welfare of the rural people with efforts to remedy poverty and food insufficiency. The rural poor has been defined to be small-scale farmers, tenants, and the landless.<sup>8</sup> It has been contended that equity and efficiency could be satisfied simultaneously through technical innovations, institutional reforms, and infrastructural investments, which benefit masses of small farmers. A wide range of equity objectives has been included into development programmes: reduction of unemployment and income inequality, poverty eradication, improvement in access to public goods and services, and reduction of interregional imbalances. Major means of handling these equity objectives being intersectoral allocation of resources and the choice of particular technology.<sup>9</sup>

Recognition has been given to the fact that a two-sector model of labor-suplus economy is to overlook the problems of the rural sector in the 'short-to-medium' term. For the elimination of malnutrition and inadequate food production, productivity of small income groups has needed to be increased. The argument is that the traditional small-farm sector does not have a labor surplus but is to be the main producer of the surplus agricultural production (an important element in the course of economic development and structural change) with its labor intensive and efficient methods.

The new approach, drawing on a reevaluation of the former deve-



lopment policies, observes that due to the increased population of the rural poor, developing countries are forced to seek a different path of development than the one developed countries have gone through. Thus, these countries need to abandon capital-intensive investments in agriculture, since capital is scarce and the alternative employment opportunities for labor are highly limited.

The contention is that LDC's have neglected their agricultural sectors and have imposed discriminatory public policies on small farmers and the rural poor in general, who have suffered from lack of access to means of improvement in production. Fiscal policies have been influenced by urgent revenue needs and powerful pressure groups, while land distribution has remained to be highly skewed with credit and marketing institutions having been controlled by rural elite.<sup>10</sup>

Rural development has been the centre of planning efforts in the new consensus, though the term has assumed different meanings varying according to the particular organisation which undertakes or finances the projects, the common point having been the income (equity) criterion. In one report, for example, it is pointed out that rural development projects with explicit and direct orientations towards target groups in contrast to sectoral projects are to include nonagricultural components such as portable water supplies, shelter, rural electricity, health and educational services, and roads.<sup>11</sup> Yet rural development projects have been considered to be single sector as well as multi-sector projects. However, multisectoral projects have been expected to utilise the advantages which are to arise from a wider use of resources and the interaction of components.<sup>12</sup>

The projects are designed to provide services at a particular standard established in accordance with the nationally or regionally available resources and usually based on a 'minimum need' criterion. Although this criterion has varied among different countries, multisectoral projects have been envisaged to be applicable to various areas and target groups once they have reached a group of low income producers and have increased their incomes.

However, the success of the rural development projects are to be affected by the particular environment it is being conducted such that elements like political commitment, attitudes of local bureaucracy, terms of trade for agriculture, and related price and fiscal policies become conducive.

The main thrust of the projects is the provision of technical innovations to small farmers as their perceptions are being modified in such a way that they tend to believe in the necessity of increasing their output, and of accepting the risk associated with it.

Rural development projects, it has been argued, do not necessarily require substantial structural changes as it has been contended in some cases (e.g. assistance institutions for small farmers, land redist-



tribution]. However, projects with less structural manipulations (e.g. irrigation projects, small holder schemes, and land development projects) are to have little chance of embracing a large mass of rural people. Projects like functional or area development projects are of a general type and more likely to reach a wide proportion of rural people. Functional projects are designed to provide a particular input package to the target group whereas area development projects aim at developing large areas with below - average per capita incomes.

D.R.G. Belshaw has emphasized the need for expanding development process in rural areas beyond the economic analysis of small-farm agricultural sector.<sup>13</sup> He has articulated a number of reasons for a multi - disciplinary, multisectoral, and multi-agency approach to planning in the rural sector:

a) There are multisectoral sources of income in rural areas; and, thus this needs to be taken into account in the measurement of absolute poverty and income distribution.

b) Due to structural factors such as inequalities in resource ownership and in political power, incomes of landless laborers and tenants are not very likely to improve through general rises in farm incomes.

c) In many countries access to health and education services is an important element of consumption, which needs to be integrated into rural development projects since they are designed to increase the rural welfare.

d) Agricultural development, the main thrust of the multisectoral rural development projects, depends on various factors such as the link between farmers and trade centres (e.g. small towns, rural trade centres, and fixed or periodic rural markets) and the efficiency of the trade centres in providing farmers with social goods and services.

e) A structural change could only be started after the determinants of rural - urban migration and overall levels of fertility in the rural population are analysed.

f) Planners, having ranged the basic (minimum) needs, also need to take into consideration democratisation and deconcentration of decision making due to its potential effect on farm decision making unit.

The factors listed above involve a broader framework than agricultural sectoral planning. Generally speaking, rural development planning has inherited experience and conceptualisation from previous individual programs directed towards rural people. These include (1) community development programs, which were based on the principle of self - help and involved cultural activities, handicrafts, water supply protection, etc.; (2) employment creation schemes (e. g. rural public works) (3) integration programmes, which included the integration of rural people into earlier models of national planning in a multi-



disciplinary framework. systematisation of intersectoral coordination etc.; (4) structural transformation programmes, which entailed institutional changes in land ownership, farm systems, marketing and financial instruments; (5) poverty eradication programmes based on identification of target groups.

The new approach has reached the final point where the concept of 'integrated' rural development has been adopted. A number of techniques have been instrumental in designing this type of programmes: regional planing procedures which delimit development areas by ecological, land-use, and local administration boundaries; design of village production schemes instead of farm systems; establishment of modal villages instead of farms; recognition of a set of multiple constraints and incorporation of sequential and continuous planning which is checked against the performance; information systems for rural plan management; efficient feedback management; and physical area planning (e.g. rural service centre development, feedback networks, and urban planning with applied economic research).<sup>14</sup>

On the overall, it can be argued that rural populations of Third World countries have been gaining substantial emphasis in development policy making. Planners, drawing on the evidence from a static analysis of these countries, tend to believe that the whole development process of poor countries could be supported by improvements and progress in the rural sector. Nevertheless, due emphasis needs to be given to an intersectoral, well coordinated, and balanced growth pattern which is to cover an overwhelming proportion of the labor force and national output. As a self-sustained growth pattern gains roots, the economic structure is to be transformed towards the hoped-for consequence of simultaneous improvement in the welfare of the rural and urban sector.

#### NOTES :

- 1) I.B.R.D., The Economic Development of Tanganyika, Johns Hopkins University Press, (1961).
- 2) Ibid.
- 3) Ibid.
- 4) D. Feldman, "An Assessment of Alternative Policy Strategies in the Agricultural Development of Tanzania", E. Afr. J. Rural Development, 3,2, (1970).
- 5) I. Livingstone, "The Economic Development of Tanganyika; The World Bank View", East African Economic Review, 8,1, (1961).
- 6) Ibid.
- 7) B.F. Johnston, J. Page, and P. Wair, "Criteria for the Design of Agricultural Development Strategies", Food Research Institute Studies, 11,1, (1972).
- 8) I.B.R.D., Rural Development: Sector Policy Paper, Washington, D.C., (1975).



- 9) D.G.R.Belshaw, "Rural Development Planning, Concepts and Techniques", Journal of Agricultural Economics, 28,3, (1977).
- 10) M. Yudelman, "The Role of Agriculture in Integrated Rural Development Projects: The Experience of the World Bank", in T.Dams and K.E.Hunt (eds.), Decision - Making and Agriculture, Agricultural Economics Institute, Oxford, (1977).
- 11) I.B.R.D., op.cit.
- 12) M.Yudelman, op.cit.
- 13) D.Belshaw, op.cit.
- 14) Ibid.

### **Türkçe Özet**

#### **ÜÇÜNCÜ DÜNYA ÜLKELERİNİN KIRSAL KESİMLERİ İÇİN SEÇİLEN KALKINMA STRATEJİLERİ İLE İLGİLİ GÖRÜŞLERİN ÜÇ AŞAMALI DEĞİŞİMİ**

İktisadî plânlamacıların ilgi alanı son otuzbeş yıl içinde önemli değişikliklere uğradı. Bunların en belli başlıcası konu edilen ülkelerin farklılaşmasıdır. İkinci Dünya Savaşının hemen sonunda savaşın yıktığı sanayileşmiş ekonomileri yeniden kurmakla meşgul olanlar, sonraki yıllarda yeni yeni bağımsızlıklarını elde eden az gelişmiş ülkeleri incelemeye başladılar. Her iki tür ülke arasındaki iktisadi ve toplumsal farklılıklar sanayileşmiş ülkelerin deneyiminden yararlanılarak hazırlanmış, hazır reçete niteliğindeki Kalkınma Stratejilerinin sonuç getirmesine engel oldu.

İlkin, plânlamacıların genel amacı, yalnız ve sonuç olarak ulusal gelirdede oluşturulacak hızlı artışlardı. Kırsal alanlar böyle bir gelişmeye destek sağlayacak kaynakların bir deposuydu. Hızlı kalkınma sanayileşmekte. Tarımdaki üretim yetersizliği sanayileşmeyi önlediği için önemliydi. Tarımın iktisadi kalkınması da bu nedenle gerekliydi. Sonradan tarımın da amaçlanan ulusal gelir artışlarını kendi gelişmesiyle sağlayabilecek birincil güç olduğu kabul edildi.

Ancak, az gelişmişlerin sorunları yalnızca hızlı gelir artışlarıyla bitmiyor, tersine yalnız bu amaca yönelik stratejiler yeni sorunlar ortaya çıkarıyorlardı.

İkinci aşamada, sorunların iki yönü olduğu tartışılır oldu: Verimlilik ve eşitlik. Bunlar bazı yazarlara göre bağdaşabilir amaçlardı. Bu görüş, günümüze kadar ki plânlamacıların çoğunu etkisinde bırakmıştır.

Kırsal kesimin sorunları yalnızca iktisadi bir çerçeve içinde görülmemek gerekir. Bu sonuç, yakın zamanda plânlamacılara egemen olan bir görüş olmaktadır. Kırsal kesime «birleşik kırsal kalkınma projeleri» ile iktisadi olduğu kadar, toplumsal ve kültürel içerikli programlarla yaklaşmak az gelişmiş ülkelere yardım eden uluslararası kuruluşların bugün, üçüncü ve son aşama olan görüşleridir.



K  
Capital)

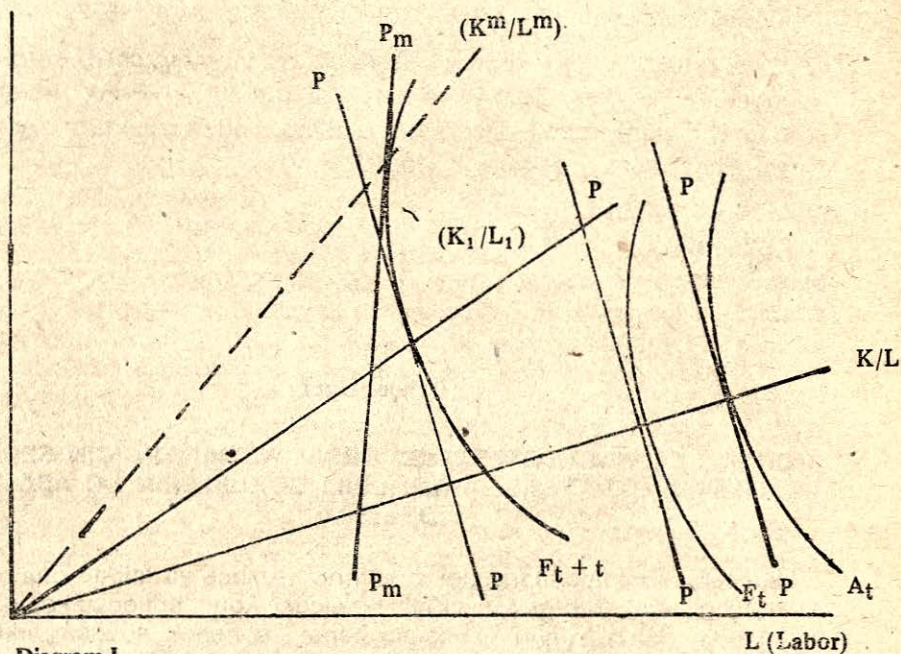


Diagram I

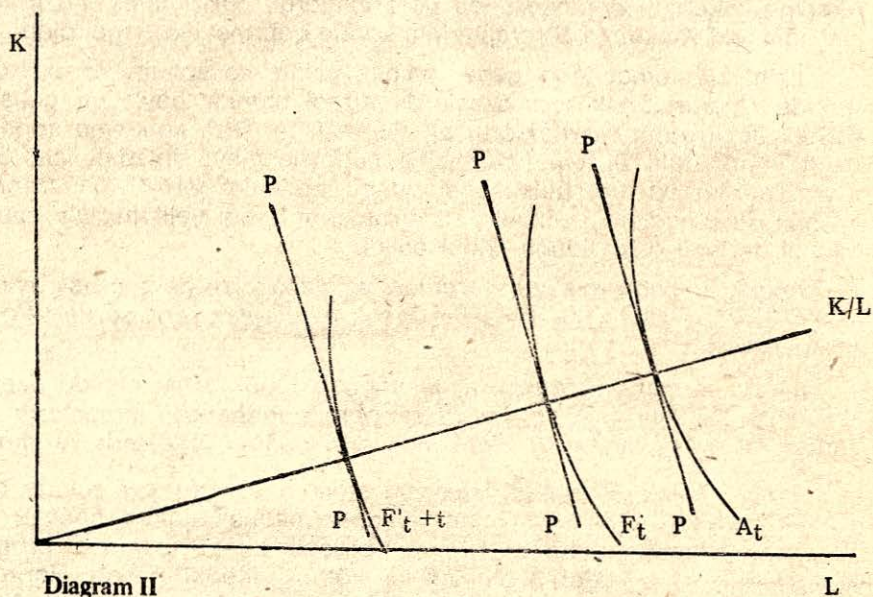


Diagram II