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PAPERS ON SOME PROBLEMS OF THE  
HUNGARIAN VILLAGE

BUDAPEST 1964



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Ferenc Erdei - Ferenc Fekete

x ECONOMIC PROBLEMS OF THE STRENGTHENING  
OF INEFFICIENTLY FARMING  
CO-OPERATIVES x

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During the entire period of the socialist reorganization but particularly since it has been completed, a definite trend in our economic policy has been represented by supporting the less efficient co-operative farms in order to enable them to reach a medium level as soon as possible. There is, however an opinion contesting the correctness of this trend of economic policy. According to the main counter-argument, the utilization of subsidies to the development of co-operative farms would prove more efficient, were those mostly bestowed rather to the advancement of the already consolidated, co-operatives.

As for the political aspects, this viewpoint is obviously untenable for the policy of supporting the co-operatives does not permit us to abandon certain co-operatives or their members after the reorganization. The superiority of the socialist large-scale farms is of general validity. Thus wherever its realization is inhibited at the beginning by various causes, special economic political measures must be taken to eliminate such difficulties. Furthermore, we cannot accept the fact that certain groups of the peasantry produce less and have a lower life standard within the co-operative large-scale farm than prior to the reorganization as it would make them dissatisfied and oppose the co-operatives. The question may, however, arise whether there are any economical aspects supporting this opinion. To answer this question properly, at least three problems must be taken into consideration.

For what reasons should we classify some of our co-operatives as less efficient?

Is the entire arable land necessary to meet the product requirements of the national economy?

Finally, how efficient are the means employed to raise the weak co-operatives to medium level?

The investigations conducted by the Institute of Agricultural Economics of the Hungarian Academy of Sciences render an adequate basis to enable us to rely, in all three questions, upon the results of methodical research work instead of biased opinions.

I.

The investigations unequivocally prove that there are objective as well as subjective causes among the inefficiency factors of co-operatives.

Objective factors are the soils of particularly poor fertility and other natural conditions due to which the peasants - in spite of their more than average work -, had lot of difficulties both in the case of co-operative or individual type of farming. In such locations the superiority of large-scale farming will manifest itself only long after the reorganization as melioration projects of more permanent character ought to be realized, special productive means must be employed, and a farming system conforming to local conditions must be developed by experimental work. All these need an extended period of time and require considerable financial investments.

Another objective cause is represented by the unfavourable density of the agricultural population in certain villages and co-operatives. There are nearly as many locations in this country where co-operatives reveal a relative labour shortage as where there is a labour surplus to be found. The difficulties are created by the fact - in the former case more frequently but rather seldom in the latter, - that due to the disproportion existing between the area to be cultivated and the available labour force, production possibilities cannot be exploited satisfactorily and, as a result, both production, and income, maintain a comparatively low level.

Finally, the objective causes of inefficiency include the fact that the given limitations of certain co-operative farms do not permit the development of sound farming /scattered, remote fields, dissatisfactory transport conditions, etc/.

Among the motives of inefficiency, however, subjective personal factors also play a significant role. Investigations revealed that the results of co-operatives where the same president has been acting for five consecutive years excelled by about 12-15 per cent the achievements of such co-operative farms where the president had been discharged. Unquestionably, however, the skill of the manager, his relationship to the members, and his management methods affect even to a higher degree the level of collective farming.

Thus the reasons why certain co-operative farms may be classified as inefficient are different and, therefore, the methods of the economic policy aiming at their development may be similarly diverse. Not only by subsidies or by the allocation of financial-technical means could the less efficient co-operatives be improved. Where the backward situation is due to a disorder in operational conditions or to the poor management, organizational means may help: as redistribution of land, a justified merger, employment of specialists, removal of inefficient mana-



ers and their replacement with such individuals the members would trust, and who had verified their professional skill before, etc. Naturally, any organisational assistance of this type has financial effects as well although not very significant. There are no accurate data available how many of the less efficient co-operatives could reach a higher level by organisational assistance, their rate is, however, definitely not negligible.

Nevertheless, the greater part of the underdeveloped co-operatives is lagging behind because of such objective reasons the elimination of which would necessitate considerable financial support. These co-operatives are characterized by their farming under a more unfavourable condition than the average, so instead of receiving differential rents they are encumbered by differential charges. In certain cases a more unfavourable situation than the average may be improved or even eliminated by means of considerable investments /reclamation, irrigation, other ameliorations/ in other cases, however, these local conditions cannot be altered /on slopes, hilly areas/. In such events only a change in the character of production, the application of a more suitable farming system can help. This, however, often involves a more extensive production type, and the engagement of less labour.

The justification of major financial investments or, possibly, even a material sacrifice depends mainly on the question to what an extent national economy needs the products of these regions.

## II.

In the case of the development of regions characterized by unfavourable natural conditions we must consider, as basis, that a continuously increasing amount of agricultural products is needed and therefore our economic plans project the enhancement of the production as a whole. Agricultural products differ, however, significantly with respect to the problem whether they should be produced all over the country, that is, in the majority of the farms or is it sufficient to produce them in certain districts, in part of the farms only.

Several agricultural products are needed by our national economy in such high quantities that their production must be carried on - at the present level of development, - all over the country, practically by each and every farm unless a preclusive reason prevents it. Their production is necessary, therefore, under the relatively most unfavourable conditions as well as the demand for them appears so high that the farms operating under more favourable conditions are unable to meet it. Such products are the food and feed grains, bulk forage, cattle, and pigs.

On the other hand, there are special products - with similar economic importance however, - the demand for which is much lower thus it seems reasonable that their required quantity should be produced only by farms most suitable for the purpose.

As for the product requirements, in the case of majority of the products national economy needs the products of all co-operatives, thus it is not permissible to develop the production only in the more consolidated co-operatives.

### III.

After all, the question is still open whether it may be considered economical to raise the less efficient co-operatives to a medium level. On grounds of the investigations conducted, this problem may be studied from several viewpoints.

According to our investigations, yields are the lowest in these inefficiently farming co-operatives. Since the inefficiency as well as the lower yields of these co-operatives can have two main causes /from the viewpoint of the single farm: objective, primarily natural conditions such as soil conditions e.g. mountainous, hilly, sandy, etc. soils - or the subjective circumstances of the single farm i.e. organization, management level, etc/, the following calculations could give more accurate results, if these two main groups of the less efficient co-operatives could have been studied separately, in a more differentiated way. No sufficient data are, however, available for this purpose. For this reason, the investigations conducted cannot answer the question how raising to a higher level the co-operatives inefficient because of natural conditions might be judged as compared to raising the mediocre ones to top level, but can solve the problem whether raising from a lower level to a medium one or from medium level to a higher one is generally more economical.

1. One of the most important indices illustrating this economic relation is represented by the development of production costs. As a basis for comparative calculations, the cost accounting data of 100 producers' co-operative, /in 1960/ prepared by this Institute have been used, utilizing the production cost data of certain crop and animal products per 1 ca. yoke and per piece, respectively, then the cost per unit and the data of average yield development.

Certain answer to the question is given by the joint development of the production cost <sup>per</sup> producing unit and unit cost. Accordingly, the comparison of the first group inefficient as far as average yield is concerned to the second /mediocre/ category reveals that the production cost per producing unit will, with a few exceptions, increase but to a relatively slight degree whereas the unit cost decreases significantly. The same trend is observed between the second /medium/ and third /satis-

factory/ groups with different proportions, however. The production cost displays a lower increase between the inefficient and medium categories and the ratio of diminishing unit cost is reversed. With other words, there is a more intensive decrease of level of unit cost between the inefficient and medium groups than between the medium and satisfactory ones.

This tendency is numerically illustrated by the following tables:

Plant production:

Average yield categories	Production cost per 1 cad.yoke		Unit cost for 1 c		Average yield q/cad.yoke	
	Ft	%	Ft	%		%
<u>Winter wheat</u>						
Less than 10 q/cad.yoke	1371	100,0	124,23	100,0	9,3	100,0
10-12 q/cad.yoke	1379	100,6	103,97	83,7	11,1	120,1
Over 12 q/cad.yoke	1485	108,3	94,26	75,9	13,2	142,3
<u>Corn</u>						
Less than 13 q/cad.yoke	1927	100,0	153,30	100,0	10,0	100,0
13-16 q/cad.yoke	1994	103,5	117,22	76,5	14,4	144,0
Over 16 q/cad.yoke	2257	117,1	95,62	62,4	19,7	197,0
<u>Sugar beet</u>						
Less than 140 q/cad.yoke	4317	100,0	36,48	100,0	114,3	100,0
140-170 q/cad.yoke	4990	115,6	31,01	85,0	155,2	135,3
Over 170 q/cad.yoke	4838	112,1	23,67	76,3	196,7	172,1

Animal breeding:

Dairy cattle

Milking average	Production cost per cow, annually		Cost of 1 litre milk		Milking average Litre	
	Ft	%	Ft	%		%
<u>Under</u>						
1600 litres	6853	100,0	3,20	100,0	1243	100,0
1600-2200 litres	6275	120,3	2,36	89,4	1923	155,1
<u>Over</u>						
2200 litres	8787	128,2	2,49	77,8	2553	205,4

Pig fattening

Categories per daily weight gain	Production cost per 1 day of feeding		Cost of 1 kg weight gain		Average daily weight gain	
	Ft	¢	Ft	¢	Dkg	¢
Under 34 dkg	4,26	100,0	14,15	100,0	30,1	100,0
34-45 dkg	4,72	110,8	11,56	31,7	40,3	135,5
Over 45 dkg	6,58	149,3	11,31	33,5	54,0	179,4

For certain products, calculations have been made to determine the excess cost of 1 q increase in the average yield. The results are illustrated by the following table:

Product	From inefficient to mediocre, Ft	From mediocre to satisfactory, Ft <sup>+</sup>
Wheat	4,50	51,45
Corn	15,06	50,38
Sugar beet	16,45	20,43

<sup>+</sup> The terms "inefficient", "mediocre", and "satisfactory" indicate here the three categories distinguished by average yields.

These data similarly reveal that to increase the low average yields to medium requires much less excess investment than to raise the medium higher. Analogous results have been obtained in course of other cost investigations. More accurately, experiences show that the volume of unit cost as well as the input per product unit will decrease with an increased average yield, but the extent of the reduction is continuously lower.

In case of three different products, the diminishing of cost on three different average yield levels is as follows: /percent/

/The figures indicate how many per cent less unit cost is due to 1 q increase of the average yield in each return category. A similar trend is observed in case of input per product unit expressed in natural unit items/.

Yields	Wheat	Corn	Sugar beet
Low	8,50 - 9,76	5,13 - 7,15	5,50 - 7,05
Medium	7,40 - 7,60	3,10 - 4,64	4,57 - 5,54
High	4,90 - 5,94	1,30 - 2,79	3,57 - 4,12



The results of our investigations thus unequivocally reveal that, at the present development stage of the agricultural production forces, and at the given level of the co-operative farms, increasing the yields is achieved much more economically and less expensively, when it is performed from low to medium than if from medium to high level.

2. Similar results have been obtained through the intensity studies conducted. The calculations disclose that, under different intensity level conditions, the change of the production level is characterized by a diminishing ratio. The change of the production level as reflected by the average of 1956-58 is illustrated by the following table:

Intensity group	Production value per 100 Ft fixed assets	Production value per 1 livestock unit in animal husbandry	Production value per cad.yoke of agricultural area	
			in crop production	in animal husbandry
I. /low/	100	100	100	100
III. /medium/	85	132	139	191
V. /high/	68	129	127	150

3. The dominance of the trend explained above is still more clearly shown if several economic indices are compared. According to the calculations made by the Department of Farm-Management of this Institute on the basis of the 1953, 1959, and 1960 data of 94 co-operative farms each 1000 Ft invested capital in the five intensity groups resulted<sup>++</sup> as follows:

I.	1151 Ft
II.	841 "
III.	739 "
IV.	688 "
V.	574 "
<u>Average</u>	743 Ft

The single group limits, according to the value of fixed assets per area unit are:

I.	Under 3000 Ft
II.	3001 - 4000 "
III.	4001 - 5000 "
IV.	5001 - 6000 "
V.	Over 6000 "

<sup>++</sup> i.e. amounting of net capital plus the value of labour input.

According to the same calculations, the increase of the production value per 1000 Ft production cost is greater at the lower cost levels as it is shown in the 1958, 1959, and 1960 data of 94 co-operatives

Variation of the cost per area unit	Increase of the production value per 1000 Ft increase of costs, Ft
From Ft 1000 to 2000	1198 <sup>+</sup>
2000 3000	1198 <sup>+</sup>
3000 4000	1198
4000 5000	1198
5000 6000	1099
6000 7000	1000
7000 8000	901 <sup>+</sup>
8000 9000	802 <sup>+</sup>

<sup>+</sup> Estimated data

A comparison of the net income per area unit to the production cost similarly proves that, on a lower investment level, the unit increase of the production cost is associated with a major increase of the net income.

The amount of the net income per unit area according to the 1958, 1959, and 1960 data 94 co-operative farms, is as follows:

Production cost per 1 cad.yoke of agricultural area, Ft	Net income per 1 yoke of agricultural area, Ft
1000	99 <sup>+</sup>
2000	297 <sup>+</sup>
3000	495
4000	693
5000	891
6000	990
7000	990 <sup>+</sup>
8000	891 <sup>+</sup>

<sup>+</sup> Estimated data

As a final result, efficiency calculation support the conclusion that, in recent years, investments have been more efficient in co-operatives of lower farming level than in those operating on higher standards. This applies generally to the less efficient co-operatives regardless of the reason why they

appear inefficient. Thus the question is still unanswered how efficiently investments can be utilized in co-operatives inefficient due to natural conditions.

#### IV.

The co-operatives inefficient due to unfavourable natural conditions have not been studied separately. There are, however, certain indications to explain how the efficiency of inputs would develop in such co-operatives.

It cannot be stated that inputs are less efficient on all fields or concerning any crop in co-operatives working under unfavourable natural conditions than in those farming under average or more favourable circumstances. Significant differences exist according to the type of natural conditions or to the given kind of crops as well.

#### X

As a conclusion, the calculations presented reveal that the less efficient co-operatives may not be considered as a uniform category, neither may be the efficiency of the inputs in these less efficient co-operatives generally regarded as less effective than that of the mediocre or good ones. The economic policy to be conducted with respect to the less efficient co-operative farms must, therefore, by all means distinguish according to the following aspects:

In those inefficient co-operatives where the low level of farming is due to personal, management, and organizational reasons, all possible means must be adopted without hesitation to eliminate these causes.

In co-operative farms where farming is dissatisfactory due to structural disproportions resulted by conditions of reorganization/area to labour ratio, inadequate proportion of the various soil types, settlement conditions, communication and transport difficulties, etc/ more reasonable farm economy solutions must be sought for.

If the inefficiency of the co-operative is due to unfavourable natural conditions but this disadvantage can be eliminated by ameliorations, the concentration of means to execute the appropriate improvements is always justified.

Finally, if the co-operatives of a district are inefficient due to such natural conditions that this situation cannot be improved by means of amelioration /hilly regions/, the introduction of a new kind production type and farming system co-ordinating the product requirements of the national economy and the relative suitability of the productive area in the respective district is needed.

All these point to the fact that the supporting of the less efficient co-operatives may not be considered only as

political necessity but, at the present development level of the agricultural production forces and of co-operative farming, it represents the efficient utilization of investments as well, at least in a great many cases.

/ The above text is the translation of the article: "A gyenge termelőszövetkezetek megerősítésének gazdasági problémáiról" by E. Erdei and F. Fekete, published in: Társadalmi Szemle /Budapest/ 1964.No.5. pp. 33-45./