

# Structural differences in COMECON and EEC agricultural productivity

## A basis for trade expansion?

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*Historically, agricultural productivity has been much greater in Western Europe than Eastern Europe. Although productivity now seems to be improving at similar rates in all areas, Western Europe still seems to be about 50% more efficient than Eastern Europe. P.C. van den Noort examines the evidence and suggests the possibility of increased exchange of agricultural products, inputs and expertise.*

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Around 1850 there were already marked differences in agricultural productivity in Europe. The highest level was reached in some agricultural areas around the North Sea. Just in these areas there was also technical progress in agriculture. Areas further from the North Sea or higher in the mountains could realize such progress only in a much later period. The situation was such that when the famous German agricultural economist Fritz Baade fled to Turkey in the 1930s via the Orient Express he could see from his windowseat all phases of agricultural development pass by.<sup>1</sup>

Since the time of this journey European society in general and also agriculture have changed drastically. Collectivization of Russian agriculture

occurred, and then came the second world war with its enormous destruction. After the war Eastern Europe behind the Iron Curtain was reshaped into a socialist society, including collectivization of its agriculture (except in Poland). Agricultural development was neglected in favour of heavy industry. In Western Europe, however, special attention was continuously paid to agricultural development. The results, in terms of increases in productivity, are impressive.

On the basis of this historical development we can infer a lower level of agricultural productivity in Eastern Europe for the period 1955–60. International comparisons of productivity are difficult, and there are difficulties concerning the type of index we

**Table 1. Agricultural productivity in Europe and USA in 1958/60 and 1973/77 (the Netherlands = 100).**

	1958/60	1973/77
Bulgaria	19	50
Czechoslovakia	63	57
DR Germany	68	77
Poland	29	45
Romania	15	43
USSR	26	39
Belgium	75	115
Denmark	99	84
FR Germany	38	53
France	56	71
Italy	—	50
Ireland	—	60
UK	49	73
Sweden	50	—
USA	130	139

Sources: P.C. van den Noort, 'Agricultural productivity in Europe and North America', *Journal of Agricultural Economics*, Vol XIX, No 1, 1968; P.C. van den Noort, 'Agrarische productiviteit van COMECON en EEG', *Landbouwkundig Tijdschrift*, Vol 95, No 6, 1983, p 26.

**Table 2. Relative agricultural productivity level.**

	1958/60	1973/77
COMECON/EEC	0.65	0.66
COMECON/USA	0.28	0.31
EEC/USA	0.42	0.47
USSR/USA	0.20	0.20

Source: P.C. van den Noort, 'Agrarische productiviteit van COMECON en EEG', *Landbouwkundig Tijdschrift*, Vol 95, No 6, 1983, p 26.

should apply. There are several indices in use, eg the yield per acre or per animal, or total production per man. I prefer net production per unit of all factor input.<sup>2</sup> Other difficulties have to do with the peculiarities of statistical definitions and surveys in the various countries. It is not possible to arrive at very precise estimates. Small differences in the productivity indices have therefore no real meaning, but large structural differences have.

There are now clear differences in agricultural productivity (see Table 1). There is an upward trend in agricultural productivity of the COMECON countries as well as the EEC countries but the relative differences have hardly changed since 1960 (see Table 2).

Agriculture in Western Europe appears to be about 50% more efficient than in Eastern Europe. The

countries around the North Sea still have the highest level in the West, whereas DR Germany, Hungary and Czechoslovakia are highest in the East. The average level of the USSR is very low. Agricultural productivity is also very low in these countries as compared with other parts of their own economy (see Table 3).<sup>3</sup>

Agriculture in the USSR and in COMECON in general has a lower productivity than in West Europe or North America. The latter countries therefore have a comparative advantage which could be used for economic development in the East and West! The exchange of products will not be easy because of all kinds of political considerations, but an increasing exchange of agricultural products, inputs and know-how for raw industrial materials and energy must be contemplated.

**Table 3. Net labour productivity in agriculture of the COMECON countries as % of other sectors of the economy.**

	1960	1970	1975/77
USSR	31	61	52
Romania	22	19	31
Bulgaria	30	42	55
Poland	36	32	33
Hungary	54	48	52
Czechoslovakia	41	40	40
DDR	86	78	70

<sup>1</sup>Fritz Baade, *Brot für ganz Wuropa*, Parrey Hamburg, 1952, p 92.

<sup>2</sup>J. Horring, *Concepts of Productivity Measurement in Agriculture on a National Scale*, OECD, Paris, 1961.

<sup>3</sup>UN Economic Commission for Europe, *Economic Survey of Europe*, various years.