*

It is quite impossible to give a map representing the property conditions, as we have neither adequate statistics of the entire area, nor are the property statistics of the different countries to be compared. The categories of property are not the same either, besides the public properties, the cultivated and non-cultivated areas are judged by the different countries in various ways. Some speak of establishments, some of properties. The properties extending to several administrative and statistical units of terratory cause a lot of confusion as well. The property conditions therefore, which are one of the most important matters of the agrarian states of Central Europe, will only be dealt with in text.

Prior to the First World War in most portions of Central Europe the major part of the land consisted of large estates. The institution of serfdom had been abolished but in the second half of the XIX. century; its traces, however, could be found in places even in the beginning of this century.

The spare population and the extensive farming of the southern and eastern portions of Central Europe made the high number of large estates quite comprehensible. Since the First World War, however, extensive land reforms have been performed, especially in the new and enlarged states respectively. These states have made vigorous efforts to deprive the old proprietors of their estates because of national causes.

More than half of the territory represented by our map changed owners in 1919-20; thus, a great number of the old landholders have become minorities. Apart from the mapped areas of Italy and the Ukraine, an area of 15 million hectares changed owners in Central Europe in consequence of the agrarian reforms executed after 1918.

In Czecho-Slovakia the area of the land detached from their owners constituted some 29 per cent of the total area of the country; in Roumania some 20 per cent.

the various countries. In general, the estates of over 200-300 hectares had been expropriated; nevertheless, exceptions were made in both directions. Lands of a few hectares had been very often taken away from their owners, while in some cases large landed estates of several thousand hectares remained undivided.

The exceptions were due almost in all cases to political causes. In the Carpathian Basin Hungarian farmers in an overwhelming majority fell victims to the Czech, Roumanian and Jugoslavian land reforms. Hangary has lost a considerable part of her natural wealth by this. Those who had the benefit of these land-reforms were in an overwhelming majority Czecns, Slovaks, Roumanians and Serbians.

The following Tables illustrate the property conditions after the land-reform. The holdings of over 100 hectares show the highest rate in Austria, Hungary and Czecho-Slovakia, the lowest rate in Bulgaria. Unfortunately, the distribution of the arable land by categories of property cannot be indicated, although it would be of great importance. In Austria e.g. the holdings of over 100 hectares make up some 45.7 per cent of the total area, whereas only 8.1 per cent of the arable land. In Hungary some 43.1 per cent of the total area belong to the category of over 100 hectares, while only 30.3 per cent of the arable land. In Czecho-Slovakia some 39.6 per cent of the total area belong to the category of over 100 hectares, and only 9.7 per cent of the arable land.

The small holdings of below 2 hectares show a very high rate in each country. These figures are evidences of an unreasonable splitting-up of the land. This is just as injurious a problem and in its economic effects even much more injurious, as the predominance of the large estates was in the beginning of the XIX. century.

Statistics of Landholdings.

Area		2-10 ectar er of hold			- 9	Totally		2-10 10 h o c t umber of	ares	3	above 100
Roumania / Czecho-Slovakia Jugoslavia Poland 4/Germany Italy 7/8/	671.8 1,891.9 3,027.4 3,296.5	492.4	73.5 73.7 180.0 147.3 174.1 207.9 956.1 254.0 81.2	61.1 21.2 67.8 66.2 54.5 57.3 199.8 132.5	18.7	433.4 1,634.4 3,280.0 1,648.6 1,985.7 2,998.5 5,096.5 4.196.3 884.9	27.4 72.6 52.1 44.3 33.8 63.1 59.4 78.6 27.0	40.2 21.3 39.9 42.3 54.6 27.8 17.6 11.8 62.3	16.9 4.5 5.5 8.9 8.8 6.9 18.8 6.1 9.2	14.1 1.3 2.1 4.0 2.7 1.9 3.8 3.1	1.4 0.3 0.4 0.5 0.1 0.3 0.4
Bulgaria	239.4 rea	551.6 f h o l		s in	1000 h	. 1	e s	Area of	holding	g s %	
Austria _{1/} Hungary _{2/} Roumania Czecho-Slovakia Jugoslavia Poland _{5/} Germany Italy ^{7/} Bulgaria	111 939 2.520	871 2.016 6.970 3.298 5.161 4.185 2.924 3.482 2.687	1.058 1.250 2.430 2.160 1.727 1.543 6.769 4.9719/	3.490 3.990 5.470 5.334 684 6.790 5.159 9.127	7.628 9.255 19.750 13.458 10.646 19.266/ 25.598 26.252 4.372		1.5 10.1 12.7 4.6 6.5 20.7 6.2 19.5 5.3	11.4 21.8 35.3 24.5 48.5 21.7 11.4 13.3 61.5	23.9 13.5 12.0 5.2 22.4 14.3 35.8 13.5 24.3	27.5 11.5 12.3 16.1 16.2 8.1 26.4 18.8	45.7 43.1 27.7 39.6 6.4 35.2 20.2 34.8

```
above 200 cad.acres
                             50-200,
                  20-50,
1-3, 3-10, 10-20, 20-100, 0-5 ha instead of 0-2 ha
                                             " 100 hectares
0-2, 2-5, 5-20, 20-100, above 100 ha
Cultivated area
Total area of the establishments 36.777.000 ha
0-5, 5-10, 10-20, 20-100, over 100 ha
0-2, 2-10, 10-20, above 20. Only private holdings.
20-100 ha about 2/3 part, more than 100 1/3 part
```

Austria: Statistisches Handbuch 1935. Wien, p.56 /Conditions in 1930./
Hungary: Magyar Statisztikai Évkönyv, 1937. p.76 / " 1935./
Roumania: Anuarul Statistic, 1939-1940. p.403. / " 1930./
Czecho-Slovakia: Scitani Zemedelskych Zavodu 1930. Di.I.Cast.ll Praha, Jugoslavia: Annuaire Statistique 1937.p.98-99. /Conditions in 1931./
Poland: Le premier recensement général de la République Polonaise 1921./1921./ Germany: Statistisches Jahrbuch 1929. p.60-61. /1925./ Italy: Catasto Agrario 1929. VIII. /Cond. 1929./ Bulgaria: Annuaire Statistique 1938. p.167. /Cond. 1934./

Utilisation of Arable Land.

According to utilisation the arable land may be divided into 6 groups: 1/ cereals, 2/ fodder crops, 3/ food-plants, 4/ industrial plants, 5/ areas for seeding purposes, 6/ fallow land.

Cereals constitute a considerable part of the arable land everywhere; the more, the area is less advanced. Again, the high rate of forage crops shows a developed stock-raising and an intensive agriculture. The industrial and commercial plants occupy an insignificantly slight portion of the arable land. Their rate does not rise higher than 2-3 per cent. Only the data for Austria and Silesia are higher, and in the south some provinces, like Bessarabia and Bulgaria are outstanding. Especially sugar-beets, tobacco and textile plants /hemp,flax/ furnish the most important products in this category. /In Bessarabia the sunflower/

In the group of food-plants potatoes accupy large areas in the cool, wet regions. Among the other food-plants beans, peas and cabbage are of importance. They occupy, however, only a few per cent of the arable land.

Fallow land does not mean in every case an absolutely useless area, in many places it is used for grazing. Its rate is very changeable. In Saxony, Bavaria. Bohemia and Moravia, and even in Slovakia their rate in the total area of the arable land is between 0.2-0.9 per cent, while in the western portion of Bosnia /Vrbasz-Banovina/ 23.5 per cent.

Regions Total	l area	Arable land in		ardens, ineyards chards hec		Meadows	26	Pastures	To	Forests		thers and oultivate	
Austria	7.628	1:789	423.4	96	1.3	983	12.3	340	4.5	2,952	38.7	1.468	19.2
Czecho-Slovakia	14.050	5.855		164	1.2	1.268	9.0	1.075	7.7	4.587	32.6	1.101	7.8
Poland	37.897	18.557	49-0	552	1.4	3.804	10.0	2.676	7.1	8.322	22.0	3.986	10.5
Hungary	9.309	5.622	60.4	328	3.5	.646	6.9	965	10.4	1.107	11.9	641	6.9
Roumania	29.505	13.941	47.3	659	2.2	1.870	6.3	3.293	11.2	6.584	22.3	3.158	10.7
Jugoslavia	24.754	7.496	30.3	649	2.6	3 (849	7.5	4.386	17.7	7.780	31.4	2.594	10.5
Bulgaria	10.315	3.989	38.7	161	1.6	306	3.0	700	6.8	3.268	31.7	1.891	18.2
Combined:	133.458	57.249	42.9	2.609	2.0	10.726	8.0	13.435	10.1	34.600	25.9	14.839	11.1
Germany	47.017	19.249	41.3	778	1.7		,12.0	2.910	6.2	12.948	27.5	5.317	11.1
Italy	31.008	13.003	41.9	2.298	7.4	5:817	18.8			5.670	18.3	4.220	13.6

The public data do not give us proper informations, as the state territories of 1930 were heterogeneous; we are going to deal with the cereals in detail later on in our text. Here we indicate the rate of acreage of the forage crops and food plants by provinces. The decline in the intensity of agriculture from the northwest toward the southeast is clearly shown in the decrease of the forage crop production. Here too, Bulgaria is an exception, having a higher production than her northern and western neighbours, although the climatic conditions of the country are less favourable to the growing of fodder. The rate of the food plants too, is higher in the north than in the south, but it is hard to make a proper comparison, as the categories differ by countries.

Notes: 1/ Annuaire International de Statistique Agricole 1936-37.
Rome. 1937.

		Fodder plants	Percentage	Food plan	tsX/ Per-
or arab	hectares	and forage crops 1000 ha.	of arable land	1000 ha	centage of arab le land
Saxony	723	161	22.3	111	15.4
Bavaria	2.629	542	20.6	382	14.5
Austria Silesia/Lower and Upper	1.978 /1.829	378 273	19.1 15.0	233 305	11.6
Bohemia	2.457	480	19.5	327	13.3
Moravia	1.383	259	18.8	211	15.3
Slovakia	1.723	221	12.8	240	13.9
Ruthenia	229	21	9.2	49	21.4
Hungarian Transdanubia	2.085	363××/	17.4	143	6.9
Great Hungarian Plain	2.739	235*x/	8.6	188	6.9
Kraków Voivodeship	904	123	13.7	-	
Lwów	467	44	9.4		-
Bucovina	322	53	16.5	53	16.5
Transylvania	3.032	302	10.0	151	5.0
Ancient Roumania	5.757	335	5.8	212	3.7
Bessarabia	2.989	42	1.4	78	2.6
Slovenia /Drava-Banovina	/ 314	45	14.4	69	22.0
Croatia /Sava-Banovina/	1.286	126	9.8	127	9.9
Bácska-Bánát/Danube-"/ Serbia/Morava and Drina	2.179	101	4.6	60	2.7
Banovina/	1.515	32	2.1	57	3.8
Bulgaria	3.711	226	6.1	142	3.8

Notes: 1/ The data for the German provinces, Austria, Poland and Bulgaria refer to the year of 1935; for Czecho-Slovakia to 1930; for Hungary and Roumania to 1938; for Jugoslavia to 1937.

xx/ Only fodder.

x/Food plants are raised as mixed crops especially in the Balkan states e.g. in Roumania in 1938 food plants were raised unmixed in an area of 495.000 hectares; and as intermediates in an area of 2.3 million hectares.

The Acreage of Cereals and Potatoes by Regions.

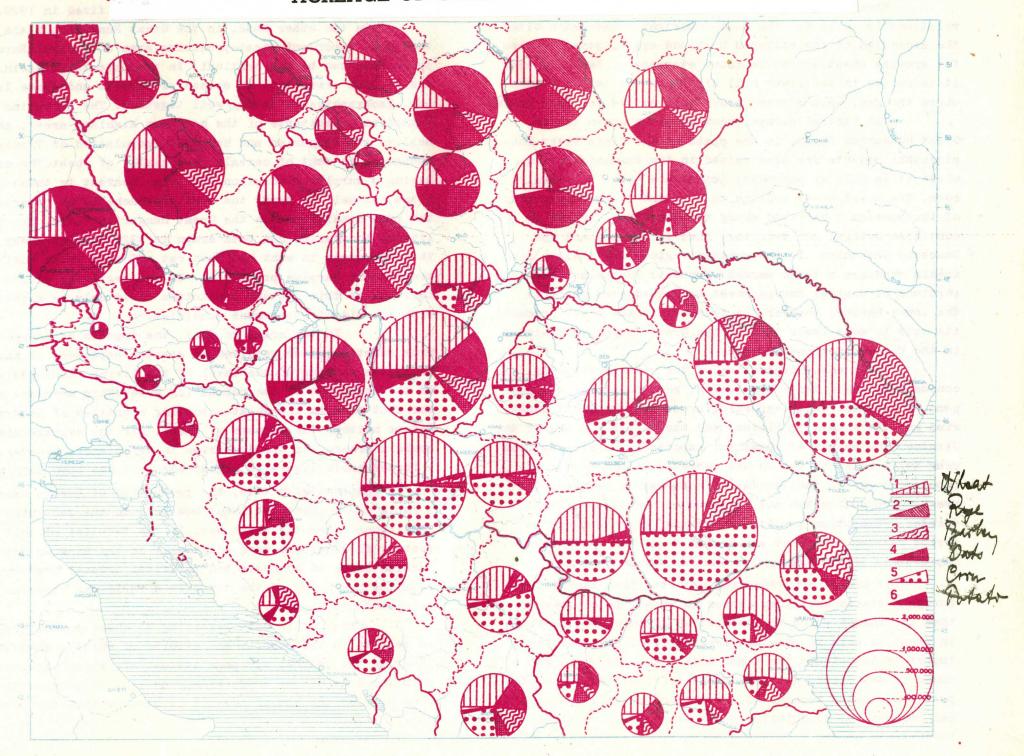
Bread-grains /cereals/ have been and will remain the most important products of agriculture. Their acreage occupies the larger half of the arable land in the less advanced agricultural regions, as well as in the intensely cultivated ones.

Beside cereals potatoes come next in importance. Being the most important substitute for bread in the northern half of Europe, they are raised in large quantities. Cereals and potatoes combined occupy more than three-fourth of the total area of the arable land in most portions of Central Europe. Austria and Dismembered Hungary are notable exception to this, being their rate about 71 per cent. In the north-western sections the various kinds of cereals and potatoes are being raised in almost the same proportion. In the southern areas, however, one-crop agriculture is dominating. The chief product itself often occupies the larger half of the arable land, while to the south and east of the Carpathian Basin the two plants raised in the largest proportion take more than three-fourth of the arable land. More advanced agriculture results in a diversified production.

Corn /maize/ needing a warmer climate does not grow in the northern regions. It is raised in large quantities in the south. In the northern half of the Balkan Peninsula corn is the principal product.

Province	Year	in 1000 ha	Percentage of the to- tal arable land	of po-	of the	rate of
Saxony	1935	438	60.5	106	14.7	35.2
Bavaria	1935	1.635	62.2	358	13.6	
Silesia/Lower, Upper/	1935	1.152	63.0	294	16.3	75.6 79.3
Austria	1935	1.160	60.0	202	10.5	70.5
Bohemia	1930	1.467	59.7		11.0	
Moravia	1930	806	58.3	179	12.9	70.7
Slovakia	1930	1.177	68.3	197		71.2
Ruthenia	1930	152	56.4	43	11.5	79.8 85.2
Cacho-Slovakia	1930	3.602	62.1	690	12.0	74.1
Poland	1935	11.605	64.0	2.832	15.3	79.3
Hungarian Transdamubia	1938	1.475	70.7	121	5.8	76.5
" Plain /dismemb./	1938	2.144	78.3	142	5.2	83.5
Dismembered Hungary	1938	1.116	74.7	292	5.3	80.0
Slovenia /Drava-Banovina/	1037	194	63.0			
	1937		61.8	58	19.3	81.2
Bácska-Bánát/Danube-" /	1937	976	75.9	95	7.3	83.2
Ancient Serbia /Drina		1.937	88.9	29	1.3	90.2
and Morava Banovina/	1937	1.392	91.8	27	1.8	93.6
Jugoslavia	1937	6.162	82.2	266	4.4	86.6
Transylvania /and perts/	1938	2.511	82.8	01	7.4	
Ancient Roumania /Regat/	1938	5.025	87.3	91 29	3.4	86.2
Bessarabia	1938	2.645	88.5	34	1.2	87.9 89.7
Roumania	1938	11.389	86.9	203	1.6	88.5
Bulgaria	1935	2.753	78.7	22	0.6	79.3

ACREAGE OF CEREALS AND POTATOES



Wheat is in Central Europe - just as it is in world relationships - by far the most important bread-grain. With the exception of the elevated highland areas, possibilities for growing wheat are to be found everywhere. Nevertheless, it is raised in the lower hill districts and in the plains where the dry, warm summers prove well suited for this grain.

In Central Europe, most wheat is grown in the Great Hungarian Plain, in the plain of the Tisza River.Considerable amounts are also raised in the Roumanian Plain where it is only of secondary importance being replaced by corn. The third wheat belt is to be found in the dry regions of the Russian table land along the Black Sea, and it is continued outside our territory towards the Don and the Caucasus Mountains. In the western regions the Italian Peninsula produces a large amount of wheat. In the northwestern portions of Central Europe wheat is raised everywhere in the lower basins; however, as compared to the other products, its rate is much lower than in the Great Hungarian Plain or in the Eastern European steppes.

The wheat production of the western areas is consumed by their dense population; several places even depend on imports. Wheat-exporting areas are the Great Hungarian and the Roumanian Plains, and the steppe regions of the Ukraine. The amount of wheat for exports is decreasing from year to year; it is due to the increase in the number of population and to the increasing home-needs; besides, the average production has not improved either since several decades. /Exception to this is Germany, where during the period between the First and Second World War a constant improvement in the average production was noticeable.

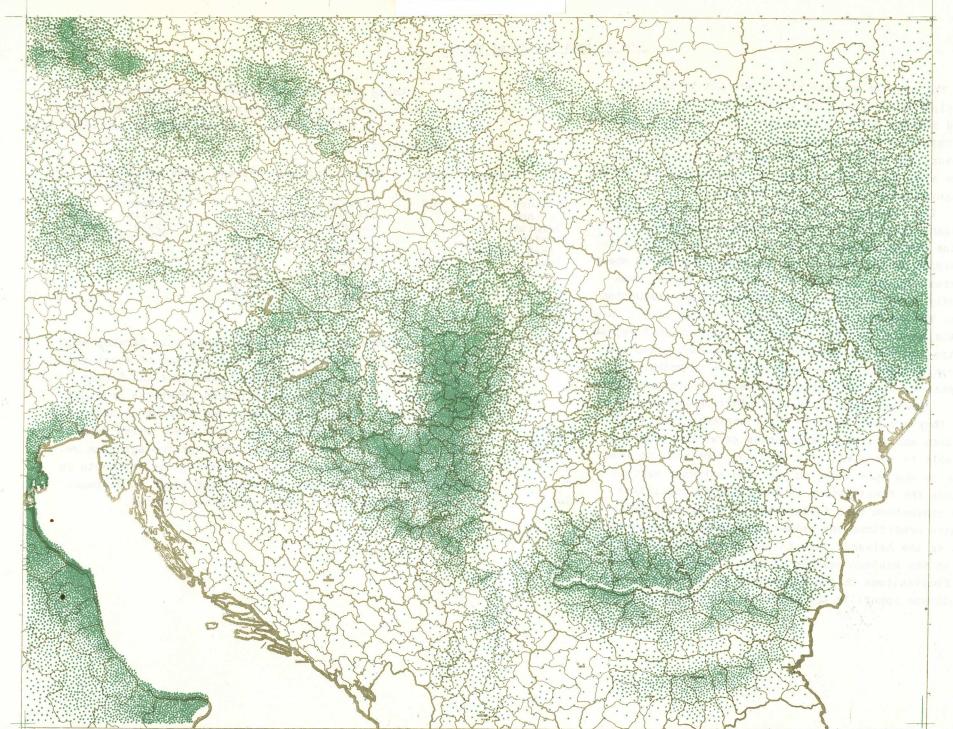
European states having an excess in wheat, is not higher than the amount which the population of this area lacking in wheat is able to consume. Nevertheless, an export and import trade between the areas with a surplus wheat and those in deficiency met with great difficulties during the past two decades because of the unreasonably fixed political boundaries. Especially in the bread-grain supply of some borderlands of the Carpathian Basin arose great difficul-

ties in consequence of the new boundaries fixed in 1920.

On the other hand, in the Great Hungarian Plain, in that most important wheat-producing area of Central Europe. production has become critical. In the Carpathian Basin. namely, the areas with an excess of cereals and those lacking, geographically belong well together. The Slovakian and Ruthenian inhabitants of the northern highland areas, as well as the Hungarian and Roumanian population of Transylvania are in want of cereals, especially of wheat. The area having a surplus production and lying nearest to these regions, as well as being the best approachable as regards the road conditions, is the Great Hungarian Plain. The political boundaries had been drawn in 1920 in such a way that the areas in want had been cut off from those having the highest surplus production. In the beginning of the thirties of this century production could only be maintained with the aid of government subsidies.

In the areas in want, the imports of cereals from remote regions resulted in greater expenses, as well as in the sinking of the level of the living standards and in the abatement of the purchasing power. This accounts for the fact that in the wheat-exporting countries of Central Europe neither the acreage of wheat, nor the average yields could increase. In the countries in deficiency, however, a forced production with higher expenses has been carried on. In contrast with this, the production of Russia showed a rapid development, at least compared to the declining conditions after the World War. In the twenties of this century fluctuations were noticeable in the Russian production owing to economic and political crises; however, from the beginning of the thirties a rapid and vigorous development has started.

The public data referring to wheat production, as well as to the imports and exports of wheat and wheat flour in the Central European states, are given combined with the data of rye production. The list of sources used when drawing the map of cereals is given within the text of rye production as well.



The highest average yields are not to be found in the principal wheat-producing areas, but in the most densely populated regions where an intensive cultivation is carried on. The averages are high in the Bavarian Basin along the Danube, in Saxony and Silesia./20-26 q per one hectare./ These averages are even surpassed in Italy by the average production of the irrigated wheat fields of the Po Basin.

The lowest yield of wheat is to be found partly in the highland areas, Northeastern Carpathians, Dinaric Alps/partly in the steppe region around the Black Sea which, however, especially to the east of the Dnyestr, is a chief wheat-producing area. To the north of the Carpathian Basin, even in the densely populated areas, the average wheat production is very low. The central and the western portions of the Carpathian Basin show a fair and a good fair average in European relationships; on the peripheries of the highland areas and in Transylvania, however, the yield of wheat is rather low and approaches that of the Balkan and Eastern European states.

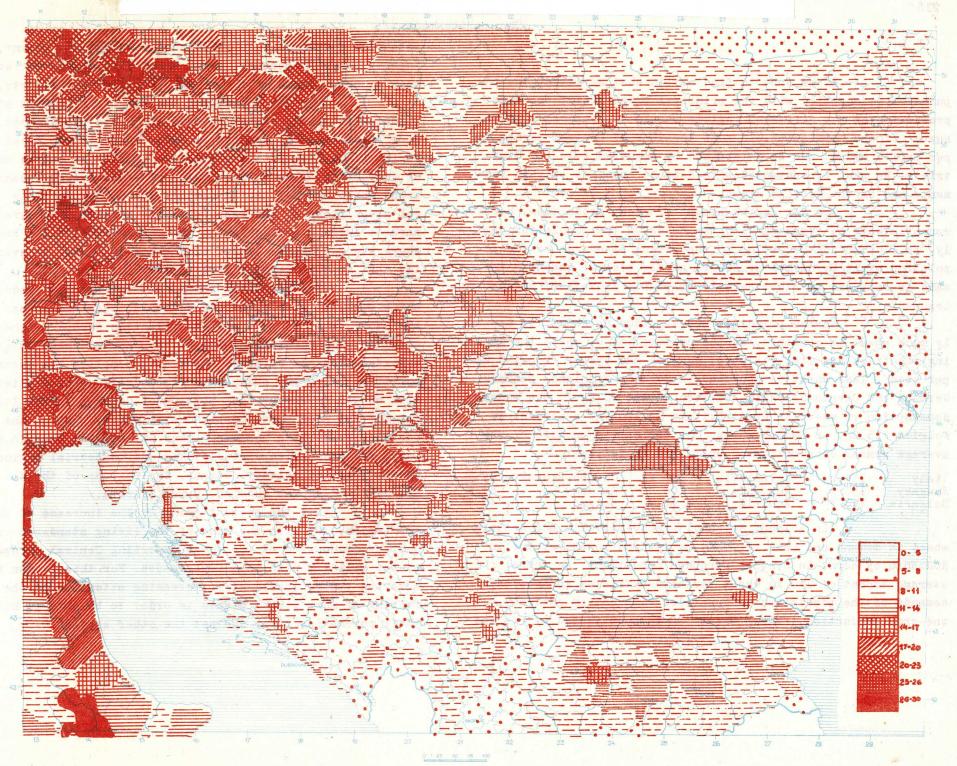
The averages of wheat production are not only higher but they are more stabil in the western areas, while in the eastern and southern territories great fluctuations are noticeable in the yield of production from year to year. This is due to the fact that, in the less advanced agricultural regions the fluctuations in the climatic conditions affect the production more decisively. It is true indeed, that climatic conditions are rather fluctuating in Eastern Europe and in the Balkans, than in the areas being under the influence of the western oceanic climate. Similarly, there are great fluctuations on the borderland of the various big European climate zones: in the Carpathian Basin as well.

Among the European averages of production the Central European ones are illustrated by the following data. /Averages of the period between 1935 and 1938 in quintals per one hectare./

Western	states:	Central European	states:	Eastern and States:	
Denmark Holland Belgium Sweden Great Britain France	30.2 29.6 26.9 23.7 22.6 15.1	Germany Czecho-Slovakia Austria Italy Hungary Bulgaria Poland Jugoslavia Roumania	23.3 17.5 16.5 14.8 14.6 13.6 11.9 11.9	Greece Russia Spain Portugal	9.8 8.8 8.5 8.3

Of the Central European states only Germany and Italy showed a constantly improving average of wheat production during the period between the First and Second World War. The other Central European countries produced averages with annual fluctuations and without a considerable rise. In the states established in 1920, which from national point of view had performed various agrarian reforms, without taking into consideration the interests in production, the averages of production began to decrease and remained low for a longer or shorter period.

AVERAGE YIELD OF WHEAT PER ONE HECTARE IN QUINTALS



/Per capita amount/

If we want to find out to what an extent the population is supplied with the principal bread-grain, the wheat production of the different regions should be compared with the number of the population. In most sections of Central Europe the per capita amount can be determined by detailed data per districts. We must be contented with data by counties only in Roumania and in the Russian areas.

The per capita amount of wheat production, however, cannot always be compared with the needs of the population, partly, as consumption according to the living standards of the population might be higher or lower, partly because wheat in demand is replaced by other cereals or plants /potatoes, vegetables, legumes/.

In the principal wheat-producing countries usually much wheat is consumed. In the consumption of wheat the leading countries are Italy, France, Hungary and Greece /150-155 kg. per head/; less wheat is consumed in Poland, Finnland, Denmark, Germany and Czecho-Slovakia /between 40 and 80 kg./. The annual consumption of wheat in Great Britain is 125 kg. a person, in Belgium 115 kg, in Sweden 85 kg. The per capita amounts of the average annual consumption of wheat are as follows:

Italy	155	kg	Jugoslavia	120	kg	Czecho-Slovakia	75	kg
Hungary	150	11	Roumania	100	11	Germany	65	11
Bulgaria	140	11	Austria	80	11	Poland	40	99

In Poland, Germany, Czecho-Slovakia and Austria wheat in demand had been replaced by rye and potatoes, and in Roumania by corn. In Central European conditions, an annual average amount of 100 kg wheat per head sufficies to meet the demands of the population in countries with not an entirely one-crop production. /Where wheat can be substituted by rye and

potatoes/ Where wheat is produced far below that amount, imports become necessary. Where wheat is produced far above that amount, there is a surplus production for exports.

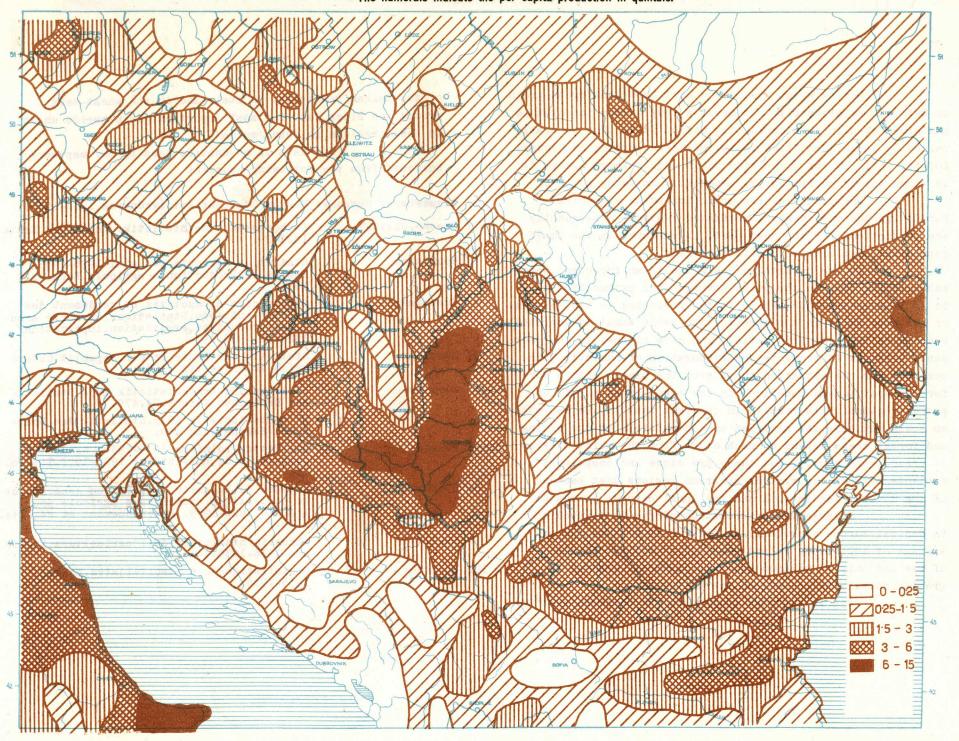
The map indicating the per capita amount of wheat illustrates the fact that in Central Europe the highest surplus production for exports is to be found in the Great Hungarian Plain. Here, in general, the annual per capita amount of production is more than 300 kg. There are even expansive areas where the per capita amount exceeds 600 kg. This central great plain of the Carpathian Basin finds the nearest markets for its production on the peripheries of the Basin, where the per capita amount diminished to 25 kg. or even below that in considerably large areas.

The Roumanian Plain has also surplus production which supplies with wheat the Roumanian highland areas, on the other hand, it is exported to Western Europe by the excellent transportation ways of the Danube. Wheat is also exported from the Ukraine, which also supplies its northern portions, being the southern parts usually well supplied with wheat. In the western portion of Central Europe Italy is, for the most part, supplied with wheat, just as the more fertile basins like Moravia, Lower Silesia and Bavaria. However, the densely populated mining and industrial regions show a great deficiency./Saxony, the regions of the Bohemian Erz Gebirge and the Sudeten, Upper Silesia./

With the present swing in the increase of the population, and with the rise of the living standards the surplus production of the wheat-exporting Central European states will diminish in a few decades. For this reason these agrarian states should give increasing attention to the raising of more useful plants in order to be able to hold their purchasing power against the other states.

WHEAT PRODUCTION COMPARED TO THE AMOUNT OF TOTAL POPULATION.

The numerals indicate the per capita production in quintals.



Rye.

9/ Italy:

10/ Ukraine:

Beside wheat rye is the most important bread-grain in European relationships. It needs a less warmer temperature and grows even in less productive soils. It is thus generally raised in large quantities in the northern portion of Central Europe, while in the Carpathian Basin and Southern Europe it is grown but in poorer soils /especially in sandy soils/.

The principal rye-producing areas of Central Europe are the most densely populated regions, consequently the production, for the most part, is consumed by the local population, and little is left for trade.

In the Carpathian Basin rye is an important wheatsubstituting crop in the years having a bad production, as
it is less pretentious and is better resisting to the changes
of weather. While in the more fertile soils wheat is scorched
because of the long arid period, rye gets ripened in the poor
sandy soil, as it prevents the evaporation of humidity. This
accounts for the situation that, even the places with a more
fertile soil depend sometimes in the bread-grain supply on
poorer regions. This results in the fact that in the Carpathian Basin not only the agrarian and industrial, or the mining
and forest areas depend on each other from the point of view
of bread-grain supply, but there are close and compulsory
contacts between the various agrarian regions just because
of the diversities in soil and the local changes in weather.

A large scale production of rye is carried on in Central Europe especially in the Polish regions. As an average of 1921-1938, Poland produced 60 million quintals of rye and only 17 million quintals of wheat. Germany is growing roundly twice as much rye as wheat.

Rye is entirely lacking in the northern portion

of the Balkan Peninsula, in Italy and in the wheat-belt around the Black Sea. The most important grain beside wheat in these regions is corn /maize/.

The data of production used by our map were borrowed from the following sources:

1/	Dismembered Hungary:	Magyar Statisztikai Évkönyvek,1926-1935.
2/	Czecho-Slovakia:	Cechoslovakische Statistik: Anbau und Ernte 1923-29.
3/	Roumania:	Statistica agricola pe anul 1926-1935. Partea II. Productiunea agricola. Bucuresti 1936.
4/	Jugoslavia:	Superficies productives et rendement des plantes cultivés. Statistique agricole annuelle /production, exportation, importation/ 1929-30,1933-39.
5/	Austria:	Statistik der Ernte in der Republik Öster- reich im Jahre 1928-1935.
6/	Germany:	1/ Anbau und Erntestatistik 1934. Statistik des Deutschen Reichs. Bd. 479.
		2/ Erntestatistik 1935.Statistik des Deut- schen Reichs.Band 489.
7/	Poland:	Statystyka rolnicza 1933-1938. Revue trimestrielle de statistique 1926-1927.I.42
8/	Bulgaria:	Royaume de Bulgarie Direction générale de la statistique. Statistique agricole pour l'année 1926-1935. Ensemencement et récolte.

Annuario Statistico dell'agricoltura Itali-

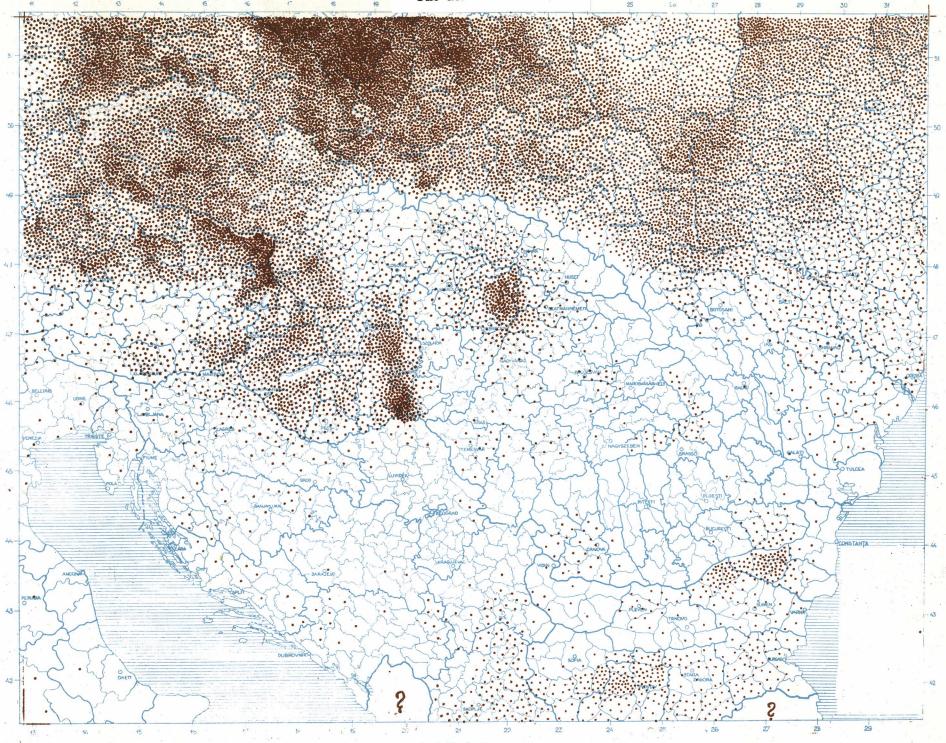
Socialisticeskoje stroiteljstvo. Moskva.

I.45.B.24.

1935-1936.

ana 1936-1938. Vol. I.

RYE
One dot = 5000 quintals

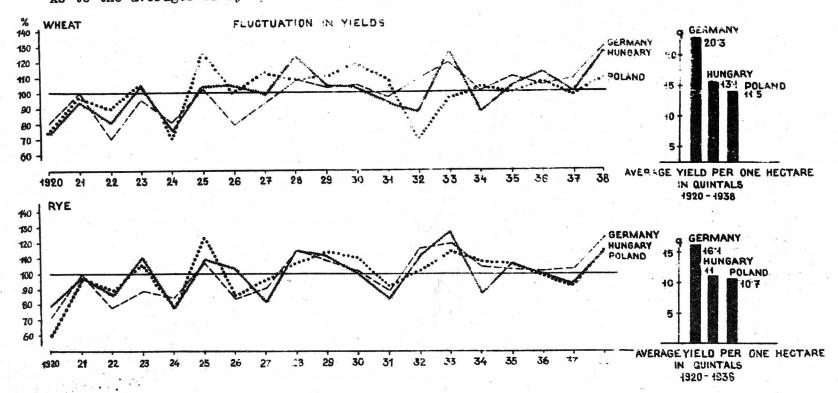


Rye is produced to the largest extent in the more densely populated areas of Central Europe, where the methods of cultivation are more advanced. The regions producing the highest averages and those producing tye in the largest acreage are congruent or at least near to each other. In case of wheat it is on the centrary & vertheless, the average production of the chief Polish Tyerareas is somewhat lower than that of Saxony. Silegia, the Bavarian regions and the Vienna Basin.

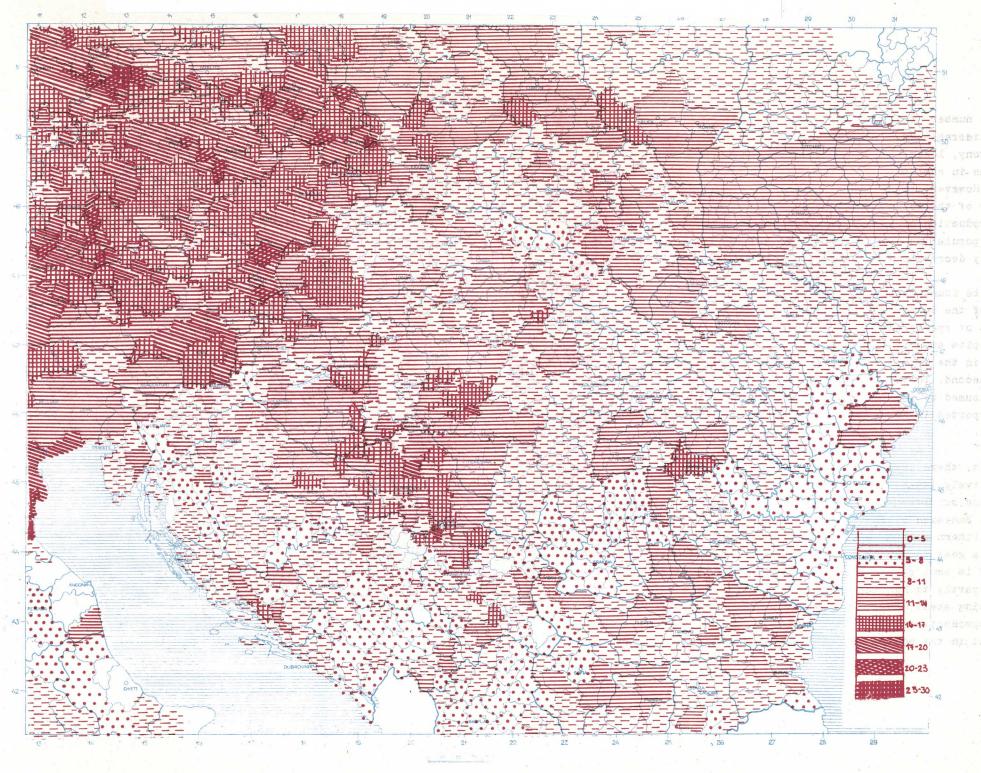
As to the averages of rye production, it

should be taken into consideration that rye is crowded out by wheat from the more fertile areas to the less fertile ones. This accounts for the fact that rye does not produce such high averages even in the highly developed agricultural areas as wheat, barley or even cats. However, he annot al yield of the less pretentious cereals does not show suc great fluctuations, as that of wheat.

There was not a considerable increase either in the rate of the acreage, or in the yields of rye production during the past two decades between the First and Second World War.



AVERAGE YIELD OF RYE PER ONE HECTARE IN QUINTALS



In comparing the results of rye production to the number of the agricultural population, areas with a considerable amount of surplus production are to be found in Saxony, Lower and Upper Silesia. Central Poland, as well as in some portions of the Bohemian and Moravian Basins. However, in comparing the rye production to the number of the total population, it may be seen that the rye production of this area is entirely consumed by the dense population of Saxony, and the surplus production is largely decreasing in Lower and Upper Silesia as well.

The highest amount of surplus production is to be found in Central Poland, as well as on the borders of the Bohemian and Moravian Basins. The per capita amount of rye is replacing the small, or entirely lack new per capita amount of wheat. Rye is the principa bragrain in the German and Polish territories, wheat anks only second. In the northern areas the production of rye is consumed by the dense population, accordingly rye is not exported in considerable quantities and to long distances.

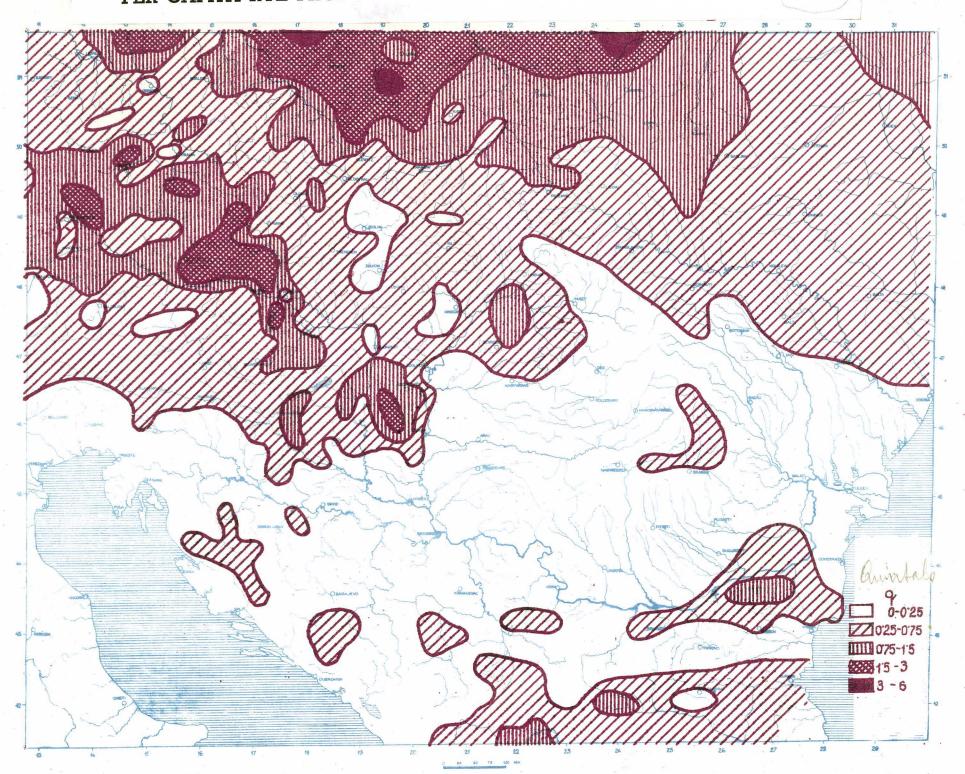
As regards the productivity of the various regions, there are great differences between them, consequently a lively inner trade has developed in these regions. Thus the surplus production of the fertile southern areas of the Bohemian Basin will be transported to the middle and northern sections being in demand. The excess rye of Silesia goes to Saxony. The surplus production of Central Poland is sent partly to the regions of Galicia being in want, partly to Northern Poland. From the fertile ryeproducing areas of the Vienna Basin rye is transported to the unproductive Alpine regions. Rye is particularly important in the poor areas of the Carpathian Basin. Poor

soils produce it for poor people. Rye-bread is generally used in the highlands, but barley and oats compete with it in the higher elevated areas. Barley in the drier, and oats in the less dry highland areas.

Similar to the boundary-like which can be drawn in Western Europe between the French wheat-consuming and white-bread eating areas and the German rys-consuming brown-bread eating ones, there is a boundary also in Central Europe running on the northern slopes of the Alps along the Little Carpathians and the Western Beskides, and it is continued towards Kraków and Ljublin in the Polish Plain. To the north of this line rys-consuming and brown-bread eating people are living, while to the south we find wheat-consuming, white-bread eating people.

wheat Production, Rye Production and Foreign Trade per Countries in the Averages of the Years 1925-1936.

.4	•		na Wheat			Rye and Rye Flour				
**	AREA	Production in	Inçórt: 10.0 g	Swirt: Balanc	e Producti		Ba Lance			
	Austria Foland Czecho-Slovak Hungary Roumania Jugoslavia Bulgaria	3.389 18.612 1a 14.210 21.576 28.212 21.688 12.880	3.799 721 3.762 - 69 20 56	28 + 1.771 540 + 81 4 + 3.758 5.383 - 5.383 2.913 - 2.844 2.020 - 2.000 883 - 828	5.505 63.115 17.149 7.137 3.218 1.982 2.187	847 20 - 8 279 2.829 -2.5 706 152 + 5 - 1.131 -1.1 1 282 - 2 2 26 -	550 554			
	Combined	120.567	8.427	11.871 - 3.444	100.293	1835 4.616 -2.7	-			
	Germany Italy Soviet Union	40.910 66.705 243.479	14.390 15.019 481	3.341 +11.049 1.278 +13.741 9.405 - 8.914	76.453 1.611 20.791	120 1 + 1	47 19 74			



If we examine the per capita amount of wheat and rye combined, viz. the relation of the products of these two most important bread-grains to the needs of the population, we find that, the northern areas and mountainous districts, as well as the poor soils lacking in wheat are in many places largely supplied with rye. There are, however, considerable areas in Central Europe where the combined production of both grains is not sufficient to meet local demands.

The greatest demand is to be found in the elevated highland areas. There is a broad belt of areas having
no supply of bread-grains in the regions of the Alps and the
Dinaric Mountains, as well as along the ranges of the Carpathians. There is also a deficiency in the highland areas of
the Balkans, in the region of the Bohemian Transport Gebirge, along
the Sudeten, as well as in some of the densely populated spots
of Silesia and Saxony. The highest surplus of both of these
bread-grains combined is produced by the Great Bun arian.
Plain.

The annual yield 150-300 kg per head is regarded as to cover the needs of consumption and seed-grains from these two principal products. Where the per capita amount of wheat and rye in relation to the total population is below this category, there is a definency where it is above this category, there is an excess to be found.

In Central Europe the areas having an excess or a deficiency of these principal bread-grains, complete each other. Especially the Carpathian Basin is in a favourable position, as here the population of the highland areas in want may be well supplied with the servals of the Great Hungarian Plain by the shortest way, without any hindrances. The population living on the outer slopes of the Campathians and being in demand of bread-grains, receive their supply partly from the Roumanian Plain, and partly from the hill districts along the outer feet of the Carpathians easier than from the Hungarian Plain. The areas of Saxony, Bohemia and the Sudetenland showing an excess and a deficiency complete well each other in short distances. The surplus production of cereals of the Hungarian Basin can be fairly well transported even to the regions of the Alps. The production of the surplus-producing regions get to the people of the Dinaric highlands poor in cereals in the hardest way. This is due to relief conditions and bad reads.

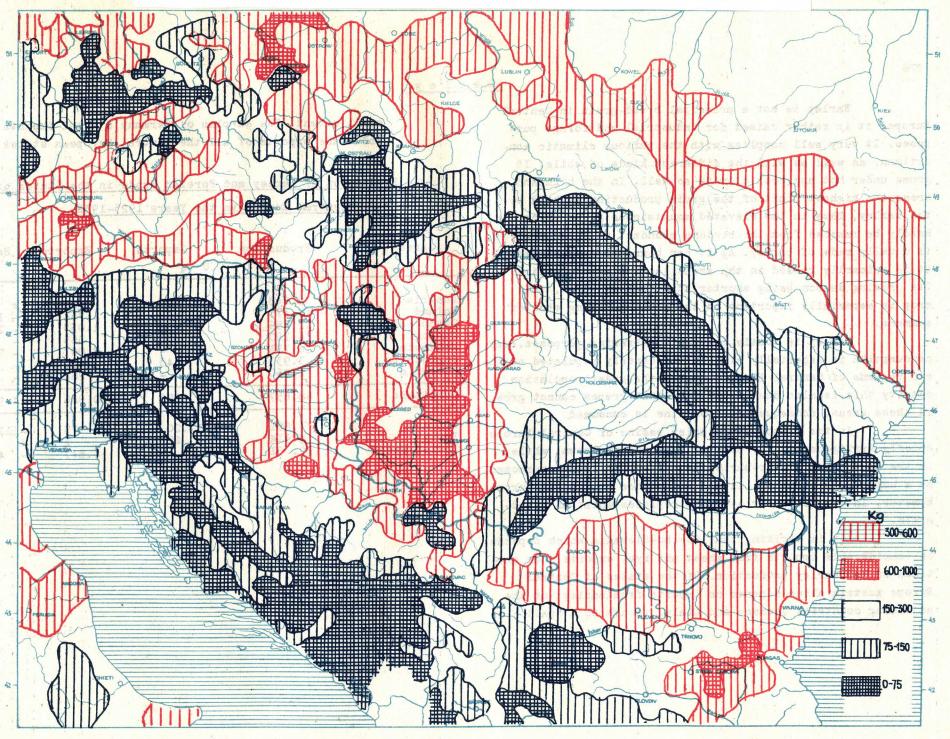
The blue and red spots of the map illustrating the excess and deficiency do not give a true picture about the amount of needs and deficiency. The areas in deficiency are usually sparsely populated, while those with a surplus production have a denser population. Thus one smaller spot of the surplus-producing areas is able to cover the needs of those areas showing a far greater deficiency. In contrast with this is the incomplete illustration of the needs of the large cities. The area of the large cities with millions of inhabitants is sometime small, in that case the smaller spots indicating little deficiency, make use of the excess of much larger areas. It is right therefore, to determine the balance of the excesses and deficiencies in absolute quantities too, by larger regions./See pages later/

This map should be compared with that representing the political boundaries of 1910 and 1930. The fundamental the territorial arrangements after the First World War are obvious. The old frontiers /1910/connected the areas with an excess and with deficiency of breadgrains in such a way that the population living in the major part of the Central European area was able to procure his first-rate food-supply from the areas of his own state, respectivel has a rplus production to inland consumers

The anabi ants living on the northern, eastern and outh astern eriphe ies of the Carpathian Basin being in needs, had lived with the population of the Great Hungarian Plain and the rich hill districts within a political and economical frame. The passive areas of the outer slopes too, had been well couplated by the regions in excess of the Roumanian Plair, Bessaratia and the Ukraine. In the northwest too, areas with an excess and deficiency had been connected by the old political boundaries and could easily communicate with each other.

The new boundaries fixed in 1919-20 created a reversed situation. They brought forth state territories with a high excess or deficiency /Dismembered Hungary, Austria/. On the other hand, they created such territories which could not easily communicate with each other. The areas best suited to buying and selling were in foreign countries, /Czecho-Slovakia, Great Roumania/.

EXCESS AND DEFICIENCY IN WHEAT AND RYE COMBINED IN RELATION TO THE TOTAL POPULATION



Per capita amount in kg Barley is not a principal bread-grain in Central Europe, it is rather raised for industrial and forage purposes. It very well complies with the various climatic conditions, as well as with the different kinds of soils. It grows under hot and cool climate as well. In the highland areas the highest limit of the grain production is held by the barley. Thus in the elevated mountainous areas which can hardly be reached from the regions abundant in cereals, bread is usually made of barley. As it can bear the droughts well, it is primarily raised in the areas lacking precipitation. Its growing season being shorter than that of wheat, this crop is especially important in the regions having shorter summers.

Barley is mostly desired for brewing purposes. Bear consumption is especially high in the densely populated northern regions of Central Europe. Beside the great population density this is also due to the fact that grapes cannot grow in these areas, consequently less wine is consumed.

In the northwestern drier basins of Central Furope chiefly spring-barley for brewing purposes is grown, while in the southeast, winter-barley is raised for forage purposes. As a human food it is of little importance in Central Europe. However, in war-times barley often replaces wheat as breadgrain.

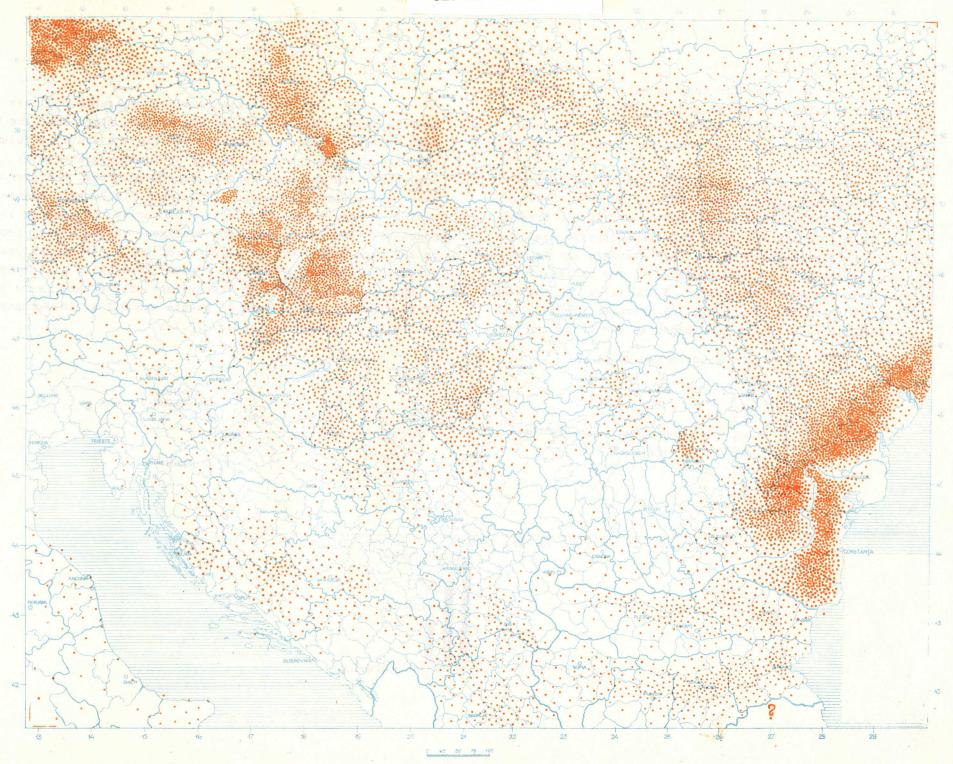
It is striking that Czecho-Slovakia which depends on considerable imports from wheat and rye, exports some onetenth of her barley production. Of the states of Central Europe Austria alone depends on imports from barley; of the adjoining countries Germany and Italy, though to a small small extent. The surplus of Germany's total imports absorbs about the exports of all the Central European states combined.

Production of Barley and Foreign Trade in the States of Central Europe in the Years 1925-1936.

Area	Production in 1 0	Imports	Exports	Balance
Austria Poland Czecho-Slovakia Hungary Roumania Jugoslavia Bulgaria	2.643 14.375 12.455 6.160 16.131 3.933 2.960	798 9 9 17 43	13 1.754 1.033 365 7.007 110 284	+ 785 - 1.745 - 1.024 - 348 - 7.007 - 67 - 284
Combined:	58.657	876	10.566	- 9.690
Germany Italy Soviet-Union	20.881 2.314 62. 51	11.20J 273 6	73 1 4.847	- 11.127 + 272 - 4.841

BARLEY

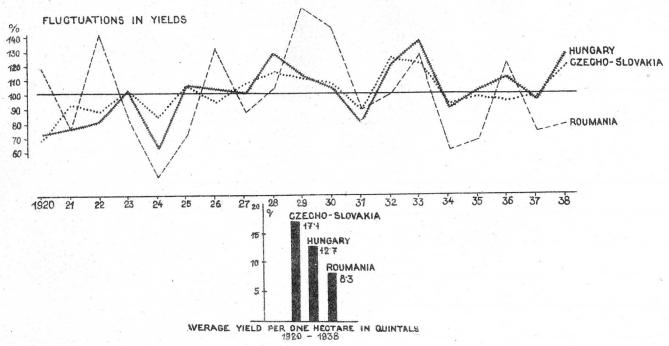
One dot = 5000 quintals



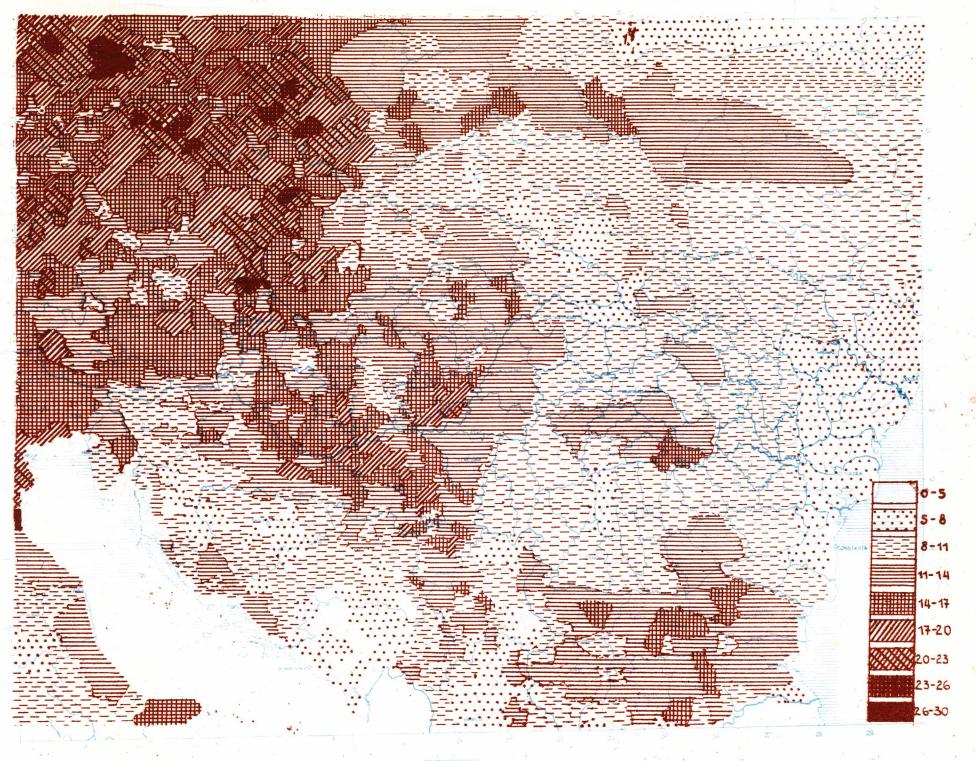
As barley for brewing purposes is raised in the densely populated advanced areas of the northwest, the average production is high. The yield of barley, however, is very low in the principal area producing fodder barley around the Black Sea.

The Carpathian Basin, just as in case of the average production of the other cereals, forms a transition area. In the northwestern areas growing barley for brewing, the Little Alföld and the wider valleys of the Northwestern Highlands produce high averages. Fair averages are to be found in the southern half of Transdanubia, in the valley of the Drava and in the southern section of the Tisza. In the other portions of the Carpathian Basin the averages are low, and are especially very low in the Ruthenian and Roumanian areas.

On the Balkan Peninsula Bulgaria produces fair averages; the portions of Jugoslavia, apart from the Morava Valley, produce the lowest ones. In the south of Poland the higher averages of the barley production are exactly congruent with the more densely populated areas. The averages have been rapidly increasing in Germany. In Russia, however, having a considerable production of barley the acreage is constantly increasing, but the averages, on the whole, remain on the same level. On the averages of 1920-1938 Russia produced 62 million q of barley; Germany 28 million q, Dismembered Hungary 6 million q. In the average of the same years the production per one hectare in Russia was 8.2 q, in Germany 19.2 q, in Dismembered Hungary 12.7 q.



AVERAGE YIELD OF BARLEY PER ONE HECTARE IN QUINTALS



The Per Capita Amount of Barley.

As barley is not used primarily as a human food, the comparison of the barley production with the number of the population does not indicate the needs and supply, but rather serves to point out the importance of the barley production in the various regions. The per capita amounts of barley in relation to the agricultural population makes the same areas outstanding which were striking in the map of production as well. Saxony, Silesia, the Bohemian and Moravian Basins produce barley in largest quantities; the same amount is to be found, however, in the region of Odessa, Southern Bessarabia and Dobrudja per grower. Barley is not raised on the Italian Peninsula, in the southern borders of the Carpathian Basin, as well as in the region of the Northeastern Carpathians.

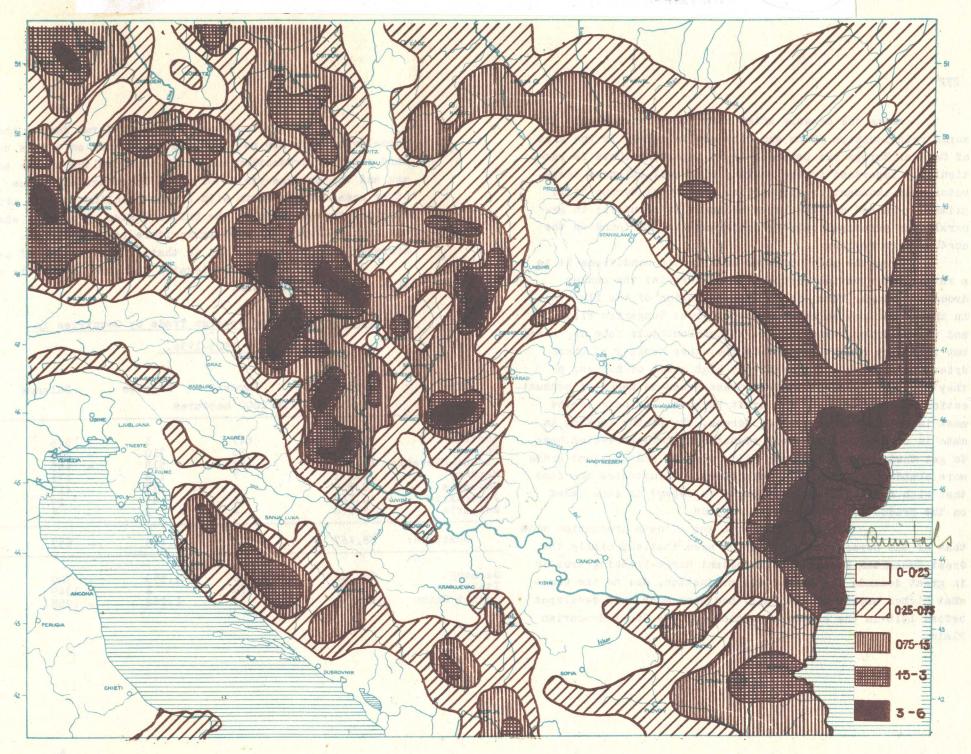
In comparing the production of barley with the number of the total population, the northwestern areas lose in importance. As an intensive livestock-raising is carried on in these areas, it is evident that little barley is left for other purposes. The Carpathian Basin is in a more favourable situation in this respect. Although the production of barley is not considerably high, compared to the other cereals, the yield of production being either reduced to the agricultural, or to the total population, the Carpathian Basin is fairly well supplied with barley. Due to the diversified relief of the Basin, similarly to other cereals, there are regions in excess of barley, and again areas in a great deficiency. The Little Alföld and Transdamubia are especially abundant in barley. Both areas produce barley for

brewing in large quantities, but having an intensive stockraising, they raise it for fodder purposes as well.

It is striking in the area of Central Europe that the Roumanian Plain being abundant in cereals, is absolutely poor in barley. Here corn is raised for fodder purposes, and corn furnishes the most important breadgrain for the population of the mountainous areas. Transdanubia is also poor in barley; it may best supplied from the Great Hungarian Plain, as the Roumanian Plain has no barley, and Moldavia produces but enough to meet its own demands. The great surplus of barley of Bessarabia and Dobrudja are being exported to long distances by sea and on the Danube.

PER CAPITA AMOUNT OF BARLEY PER TOTAL POPULATION

Quintals



Among the cereals after wheat oats ranks second in world relationships./Corn and rice not included/ In the area of Central Europe rye preceeds it in importance.Oats is particularly important in the regions with well-balanced temperature and abundant precipitation. In Central Europe it is primarily raised on the slopes abundant in rainfall; in general, the principal oats-producing area are to found in the northwestern regions.

From the point of view of climatic conditions it is a rather unpretentious crop; it cannot resist the summer droughts though. Thus, in the steppe-region of the Black Sea, in the Roumanian, as well as in the Great Hungarian Plain, and in the drier basins of the Balkan Peninsula oats is raised but in a very slight amount. On the other hand, just these drier basins have a comparatively high stock of horses, as they play an important part in these areas as means of communication, as well as used for draft purposes. As oats is the most important fodder crop of horses, the plains lacking in oats in consequence of their significant horse-breeding, have to get their supply from the hilly regions and highland areas more abundant in rainfall. This clearly illustrates the fact that rich agricultural areas ought to depend in some cases on the production of less rich regions.

Let us compare the map of oats production with that of the horse-stock. It may be seen that, especially the Great Hungarian Plain, this important horse-breeding area is in great demands for oats. Oats production, due to the somewhat higher amount of rainfall, had been much more developed before 1918 in the southern portions of the Great Hungarian Plain.

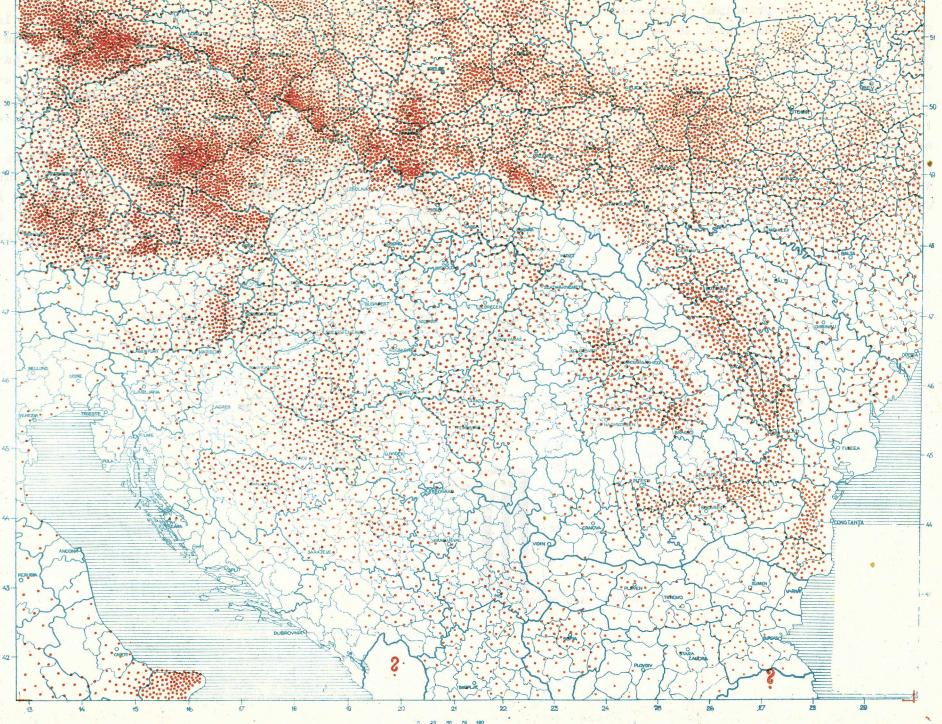
In the course of the landreforms during the Jugoslavian rule the new landholders carried on a more backward one-crop production which led to a decline in the acreage and the average yields of oats. There are also some other areas in the Earth with a great decline in oats production; thus especially the United States of America, where the highly motorisation of agriculture resulted in the decrease of horse-stock, and in that of the demands of oats.

In the humid elevated highland areas oats is also used as bread-grain.

Production of Oats and Foreign Trade by Countries in _Averages of 1925-1936.

Area	Production	Imports in 1000 hect	Exports	Balance
Austria Poland Czecho-Slovakia Hungary Roumania Jugoslavia Bulgaria	4.250 24.410 13.680 3.131 8.800 3.168 1.028	647 86 54 7 -	1 310 519 178 413 43	+ 646 - 224 - 465 - 171 - 413 - 29 - 1
Combined:	58.467	808	1.465	- 657
Germany Italy Soviet Union	63.352 5.733 151.581	1.170 1.350 4	1.559 1 1.262	- 389 + 1349 - 1258

OATS One dot = 5000 quintals



The principal cats-producing areas are congruent, on the whole, with those having the highest average yields. Cats is the most important crop in the cool, humid regions, which in Central Europe are densely populated and agriculturally advanced. In the northwestern portions the average yields are high everywhere, while in the east and south, they are low. Good fair, and fair averages are to be found in the western half of the Carpathian Basin, in the southern section of the Great Hungarian Plain, as well as in the Saxonian and Székler regions of Transylvania.

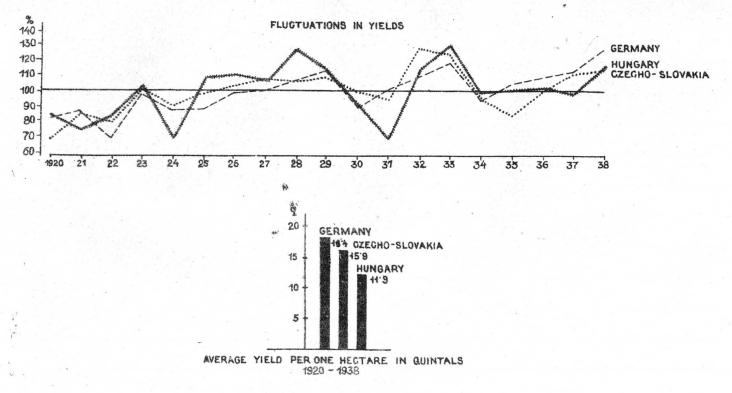
In general, oats is not such a valuable

crop as to raise it even there where its yields are low.

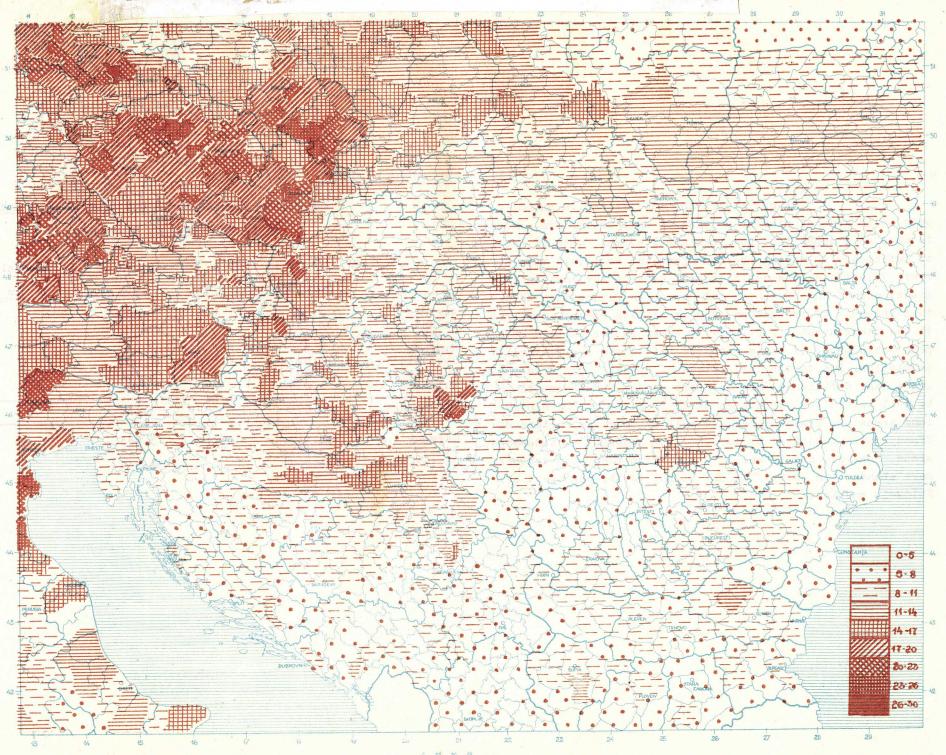
/As it is the case with wheat and corn/ The Roumanian

Plain and Moldavia are notable exceptions to this, having
a rather high production of oats, but extremely low averages. The large stock of horses of these regions accounts
for the forced production of oats; however, the yields of
the other crops are low here as well.

Neither the acreage, nor the average yields of oats show a considerable development in Central Europe. /Except Germany/ In Germany between 1920 and 1938 the average yields per one hectare have been 18.4 q, in Russia 8.6 q, in Czecho-Slovakia 15.9 q, in Hungary 11.9 q.



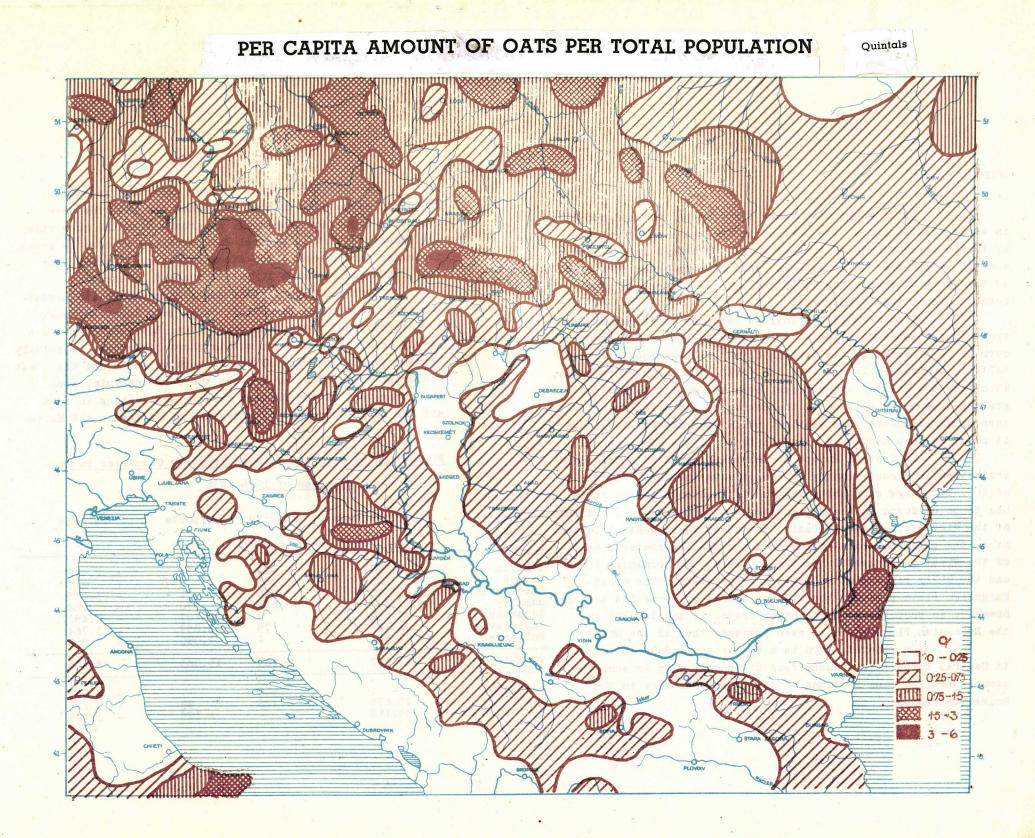
AVERAGE YIELD OF OATS PER ONE HECTARE IN QUINTALS N.



The map indicating the per capita amount of oats is in general similar to that of oats production. As oats is used as a human food but to a small extent, data of excess or deficiency are not to be read from the map. This map, however, illustrates the deficiency in cats of the eastern dry areas, and of the Roumanian and Hungarian Plains much better than the maps of production. The per capita amount, compared to the other areas, is relatively lower in the Eastern European table land, if it is compared but to the agricultural population. Due to the large stock of horses these areas, showing a high deficiency, are in great needs. These demands could be well met in the Carpathian Basin from the northern highland areas and Transdanubia, as well as from the regions of Transylvania inhabited by Germans. The Roumanian and Russian areas, however, may be well supplied from their own regions more abundant in oats. /The are lying to the northwest of Moldavia and Kiev

Comparison between the Production of Oats and the Stock of Horses by Countries.

Yield	of oats in 1000 q 1926/30	Horse-stock in 1000	Annual yields of oats in quintals
Austria	4.375	248	17.6
Poland	23.756	4.103	5.8
Czecho-Slovakia	14.017	748	18.7
Hungary	3.517	860	4.1
Roumania	11.047	1.809	6.1
Jugoslavia	3.303	1.161	2.8
Bulgaria	1.056	482	2.2
Combined:	61.071	9.411	6.5
Germany	65.412	3.533	18.5
Italy	5.947	943	6.3
Soviet Union	153.600	30.237	5.1



After wheat corn ranks first among the food-crops in world relationships. Its acreage in the whole world reaches up to the three-fourth of that of wheat, although it has lost some in recent times. The average yield of corn being much higher than that of wheat, the amount of world's production from corn is higher than from wheat.

Corn is more pretentious than the other crops. Its production depends on climate, as well as on soil. Consequently, corn is to be found but in certain climate zones, and in closed belts in certain soils all over the world. Within the corn-belts, it crowds out all the other crops, even the wheat. During its growing season, as well as in the course of its development, corn primarily needs warm weather, while with the greatest heat it requires more amount of rainfall than all the other cereals.

In Central Europe the northern limit of a high corn production is almost exactly congruent with the July isotherm of 20°. Two large corn belts may be distinguished in the Earth. One is to be found in the United States of America, in the middle of the Missisippi-Missouri Basin. The other is in Central Europe. Here, the principal corn-producing areas are the southern half of the Great Hungarian Plain, the Po Plain, the Roumanian Plain and the hilly regions of Moldavia and Bessarabia. The Great Hungarian Plain produces the highest amount of corn; its acreage however, in proportion to the other crops, is the largest in the Roumanian Plain where it even preceeds that of the wheat.

In general, corn is a fodder and industrial crop in Central Europe; as a human food it is only used in some regions; thus, in some portions of Italy, and far more in the Roumanian regions.

As a fodder crop it is most important in swinebreeding, especially in that of swines for fat. The cornproducing areas are completely congruent with the ones raising swines for fat in Central Europe. Where no corn is grown, the major part of the swine-stock consists of swines for meat, the food of which is potato instead of corn.

Corn is, for the most part, consumed by its producing areas in Central Europe. It plays less important part
in international trade than wheat does. However, there is a
lively inner trade in corn within short distances, especially
between the peripheries of the Carpathian Basin and the Great
Hungarian Plain; further between the corn-consuming areas of
the outer feet of the Eastern Carpathians lacking in corn
and the large corn-producing regions of Wallachia and Moldavia.

Production of Corn and Foreign Trade by Countries in the Averages of 1926-1936.

Area	Production		Imports	Exports		Balance
		in	1000	q		
Austria	1.247		2.922	4	+	2.918
Poland	915		281	2	+	279
Czecho-Slovakia	2.310		3.016	1	+	
Hungary	17.470		486	670	-	184
Roumania	49.872		. 5	9.487	-	9.482
Jugoslavia	34.707		75	3.839	-	3.764
Bulgaria	7.981		-	1.080		1.080
Combined:	114.502		6.785	15.083	-	8.298
Germany	-		7.605	_	+	7.605
Italy	25.636		5.228	99	+	5.129
Soviet Union	35.160		-	1.129	_	1.129

CORN One dot = 5000 quintals

Average Yields of Corn.

Corn is grown in the southern and southeastern portions of Central Europe. Apart from the Po Plain, it is raised im sparsely populated areas which, from the point of view of agricultural standards, are mediocre or backward. Consequently, its average yields are not high.

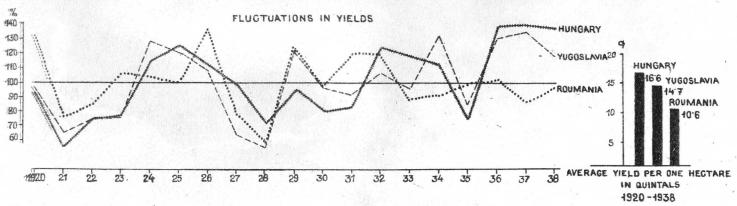
Among the principal corn-producing areas high averages are only to be found in the Po Plain, and in the southern portion of the Great Hungarian Plain. The average wield of the Roumanian areas producing corn to a large extent, is extremely low.

Because of its sensitiveness toward weather, the annual yields of corn in Central Europe show greater and more frequent ffluctuations than those of wheat. There are years, when the Great Hungarian or the Roumanian Plain do not produce a surplus of corn; there were even years, when these principal corn-producing areas were dependent on imports. This also accounts for the fact that in Central Europe, in consequence of the new boundaries drawn in 1920, special difficulties areas in agriculture. These boundaries namely, have separated those areas which because of the more or less capricious cha-

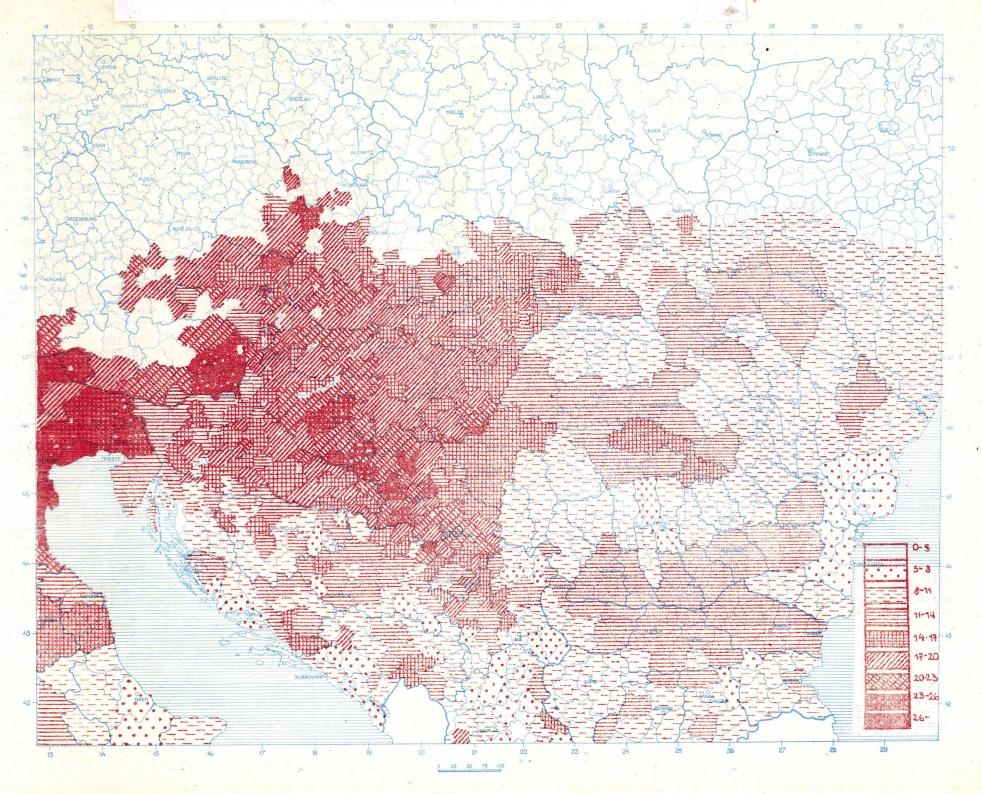
racter of their temperature, and being engaged in one-crop or more-crop agriculture, were interdependent on one another.

In Central Europe in some cases, a fertile piece of land does not secure the well-being of the population to such an extent, as a mediocre one, as just the most productive areas suffer the most in consequence of the variability in the weather. Within a state-territory, consisting of areas with different climatic conditions and varied productions, cannot occur such absurdities and economic crises independent from the fluctuations in world economy, as it was the case with the small states of Central Europe in consequence of the unjust territorial break-up.

Taking into consideration the years between 1920 and 1938 combined, the average yield of corn per one hectare was in Italy 18 q, in Hungary 17 q, and in Roumania 11 q.



AVERAGE YIELD OF CORN PER ONE HECTARE IN QUINTALS



In calculating the per capita amount of corn either in relation to the agricultural, or to the total population, the picture is on the whole the same. This is due to the fact that corn is raised in the southern and eastern portions of Central Europe where the population density is medium or low, and where some 70-80 per cent of them is engaged in agriculture.

The annual per capita amount of corn referring to the agricultural population is the highest in the southern portion of the Great Hungarian Plain, on that area /Bácska-Bánát/, which had been annexed to Jugoslavia in 1920. There are regions here where more than 15 q of the annual production falls to the share of one agricultural inhabitant or family member.

The per capita amount in relation to the total population is smaller, but the areas abundant in corn are to be found even here in the southern half of the Great Hungarian Plain, in Wallachia and Bessarabia.

From the maps of the per capita amount the surplus and deficiency are not to be read, as only one part of the corn production is used as a human food, the major part is used for fodder purposes; thus, it should rather be compared with the swine-stock. Another part again is used for industrial purposes, for distilling spirits. In any case corn is most important as bread-grain at those places which are in lack of the other bread-replacing crops, primarily of potatoes and rye.

Within the corn-belt highly and less highly productive areas of corn may be noticeable, which from
the point of view of corn supply create close contacts between the various smaller regions. Within the Hungarian Basin
great differencies are to be found in the surplus of corn,
and a strong interdependence between the peripheries and the
central areas.

A great portion of the corn surplus of the Roumanian Plain is consumed by the population of the high-land areas, likewise the surplus of the corn-producing areas of Moldavia and Bessarabia is given to the ropulation living on the outer slopes of the Eastern Carpathians.

In the southern portions of the Balkan Reninsula, where the summer is dry, corn cannot grow. In this region, however, the swine-stock is also smaller, thus cannot speak of serious lack here, just as in the northern and northwestern regions either, where there is a high density of population and a high stock of swines, but corn is not used either as a human food, or for fodder purposes.

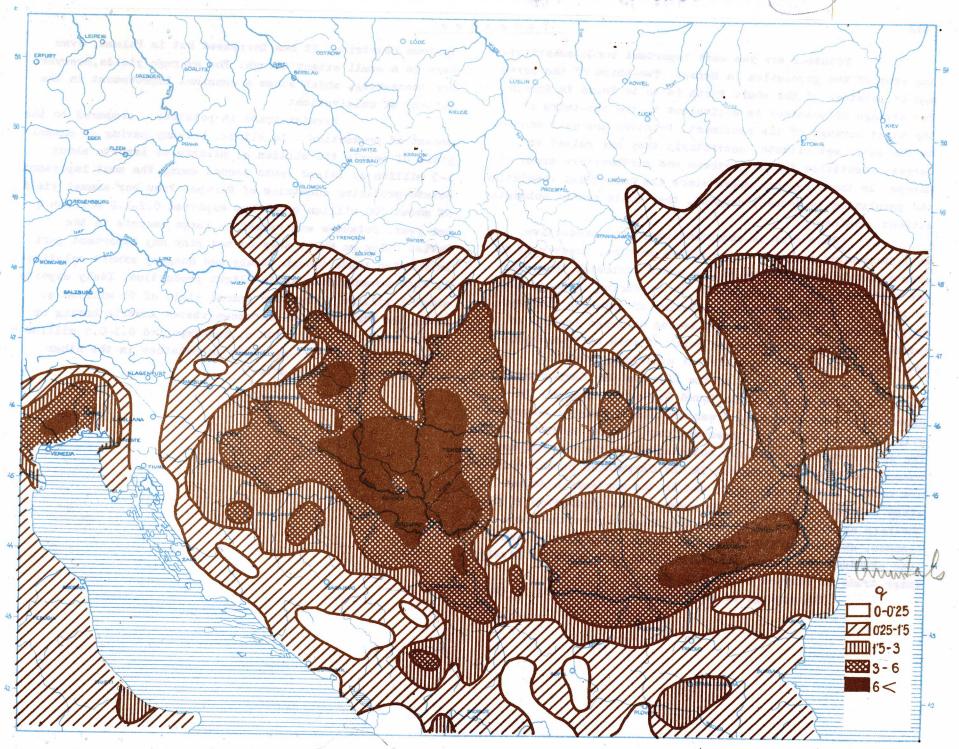
	Yield of corn in 1926-50 in 1000 q	Number of Pe population/1930/ in thousands	r hea	d Number of P swines/930/ in thousands		ine Her head and swine
Hungary	16.359	8.688	1.9	2.362	6.9	4.4
Roumania	46.071	18.057	2.6	2.323	19.8	11.2
Jugoslavia	29.900	13.934	2.1	2.924	10.2	6.1
Italy	24.773	38.756	0.6	3.318	7.5	4.1

If we add the amount of imports to the data of inland production, and from the latter the amount of exports are reduced, we get the data of the apparent consumption. In comparing them to the number of the population and the swines respectively, we get the following figures:

	Apparent consumption of corn in 1926-30 in 1000 q	Per head	Per swine	Per head and
Hungary	15.697	1.8	6.6	4.2
Roumania	37.113		16.0	9.1
Jugoslavia	26.511		9.1	5.5
Italy	31.349		9.4	5.1

PER CAPITA AMOUNT OF CORN PER TOTAL POPULATION





Potatoes are the most important bread-substituting crop of the population in Europe. Two-third of the acreage of potatoes of the whole Earth is to be found in Europe. The acreage of potatoes is equivalent to the one-third of the whest acreage of the continent. Potatoes are well adapted to the cool, wet climate, accordingly they are raised in largest quantities in the northern and northwestern areas of Europe. In those regions where since the industrial revolution the population is densely crowded, they could not be subsisted without potatoes.

This crop is unpretentious, well-productive, well-increasing and rich in nutritive matters. However, it is less transportable because of its water contents; thus, for the most part, it is consumed in the producing areas or near to them. It is due to their production of potatoes that Germany, Poland and Austria do not depend on large imports of cereals, consequently from the point of view of food supply their economic independence is not strikingly weak.

To the south of the Alpa and the Carpathians there is little potato to be found in Central Europe. The principal potato-producing areas are almost exactly congruent with the areas of the northwestern cool, humid oceanic climate. The deep roots and knots are not adapted to the dry and more compact soils of the steppes. In the Carpathian Basin potatoes are raised in the sandy soils and in the northern highland areas abundant in rainfall. In general, the population of the northern areas raise sufficient potatoes to meet their own demands, whereas in the Carpathian Basin where abundant and less abundant areas are alternating with each other, a lively inner trade is carried on in this crop.

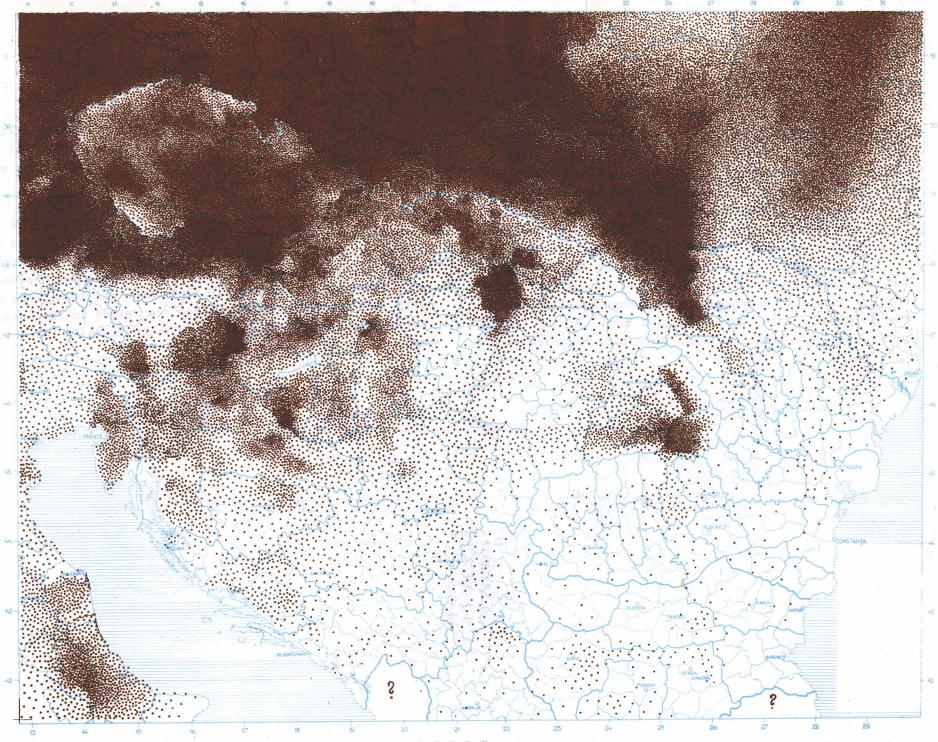
The acreage of potatoes is fairly steady in the

various countries. It has increased but in Poland, even here to a small extent though. The average yields, however, are increasing, which shows a constant improvement in the methods of cultivation.

Foreign trade in potatoes - compared to the amount of production - is slight. Germany having an annual yield of nearly 450 million q, exports or imports about 1-3 million q. Poland ranks second among the most important potato-producing countries of Europe. From her annual yield of about 300 million q she has exported 0.2-1.2 million q per year. Potatoes are raised in large amounts in the Soviet Union as well; they do not play any important part in foreign trade though. Italy and Hungary export relatively high amounts from their slight production. Italy exports about 1 million q from her annual yield of 23 million q. Among the other Central European states Austria having an annual yield of 25 million q, has imported 0.1-0.5 million q of potatoes. The Interior trade in potatoes in the other states is not Interior and Interior a

POTATOES

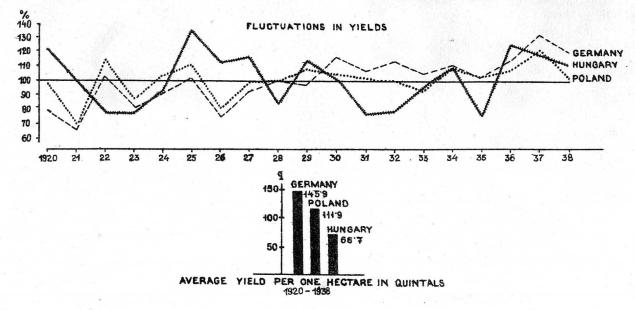
One dot = 5000 quintals



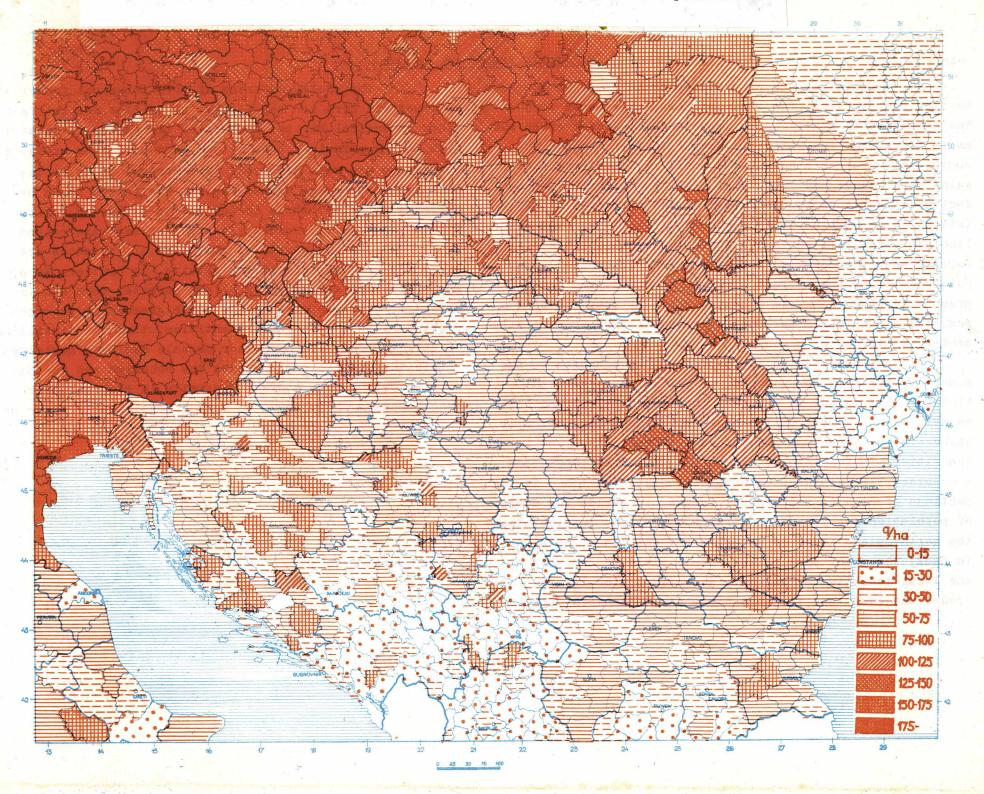
The average yield of potatoes per one hectare in Europe is about 110 q. This yield of production, however, even in the agriculturally advanced countries is rather fluctuating. Thus in 1926, Germany produced 109 q per one hectare, in 1937 192 q. In the averages of the years 1921-1938 Germany produced 145 q of potatoes per one hectare. Czecho-Slovakia and Austria 121 q, Poland 112 q, Roumania 31 q, Hungary 66 q, Jugoslavia 53 q and Bulgaria 46 q.

The high average yield of Roumania is raised by the well-developed potato-production of Transylvania.Otherwise the yields of potatoes of the Roumanian Plain are the same as those of the Great Hungarian Plain. Moving farther to the south of Central Europe, the yields of potatoes are getting lower; it is partly due to the unfavourable climatic conditions /less rainfall/, and partly to the fact that potato is a tolerated and rather crowded-out crop in the south, and it is raised but in very poor soils.

The yields of potatoes are increasing in Central Europe, just as well as in the other portions of Europe. The acreage, however, shows but a slight increase. Potatoes do not occupy areas at the expense of the other crops; they spread at most in the uncultivated regions. In war-times, however, this crop used to increase in importance and in acreage as well. For the most part, potatoes are raised in the areas being exceptionally cultivated in those times in the environment of the cities.



AVERAGE YIELD OF POTATOES PER ONE HECTARE IN QUINTALS



Potatoes are regarded as bread crops in Northern Europe, and are used, for the most part as a human food. They are also of considerable importance as fodder crops and as an industrial raw-material. Moving farther towards the south, this crop as a human food loses in importance, but gains as a fodder and industrial crop. In comparing the production of potatoes to the number of the agricultural population, large surplus is to be found in the German and Polish areas, as well as in the northern highland areas of the Carpathians, in Slovakian territories. Here, beside rye potatoes occupy the largest acreage. In the German and Polish areas extending along the Bohemian Basin illustrated by our map, the annual yield per one agricultural person and family member is over 20 q.

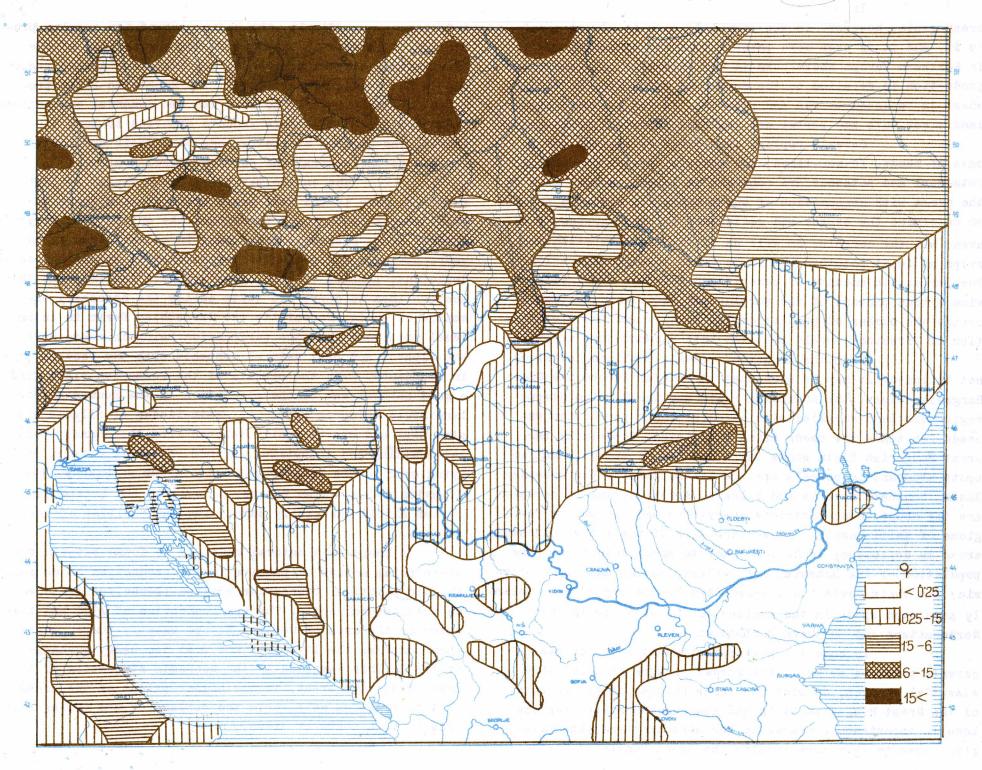
In comparing the production of potatoes to the number of the total population, we get quite a different picture. This is due to the fact that the population density, as well as the number of the non-agricultural population is higher in the areas where potatoes are produced in the largest quantities. Taking into consideration the total population, a considerable surplus production is only to be found in the portions of Silesia and Central Poland. If beside the number of population the livestock is also taken into consideration, the northwestern areas do not show any surplus of potatoes. In fact, the major part of the potato yield is consumed by the local inhabitants, and only a small portion is used for rade, but even then in short distances and chiefly around

The producing areas of both principal fodder crops: potatoes and corn are separating, as well as completing each other in Central Europe. Especially the number of swine is high in the principal potato- and corn-producing areas, as both crops are most important as an animal food. In the corn-producing areas swines for fat are raised in an over-whelming majority, while in the potato-producing regions, for the most part, exclusively pigs for meat are raised.

As an industrial raw material, potatoes are primarily used for distilling spirits. In Southern Europe, where potatoes are grown in slight amounts, corn and fruits serve for this purpose. In the south grapes are produced everywhere in considerable quantities, thus the distilling of spirits from corn and other cereals had been neglected. Within the natural compartments the Bohemian and the Carpathian Basins show a great diversity in rich and poor areas, consequently there is here a considerable inner trade in potatoes to be found.

PER CAPITA AMOUNT OF POTATOES PER TOTAL POPULATION





In Southern Europe wheat is the most important bread-grain; however, in the corn-belt corn is almost equal to it, and it is even more important in the Roumanian areas. In Northern Europe where corn is not raised at all, and wheat production in relation to the number of population is slight, wheat is replaced by rye and potatoes. In the elevated highland areas oats and barley are the most important bread-grains.

Cereals replace each other by regions and in case of needs. In war-times, for example, rye or corm-bread, oats-meal and potatoes are consumed in larger amounts even in the areas with consumption of wheat-bread. In order to be able to determine the excess and deficiency in bread-grains of an area, all the cereals, as well as of the bread-substituting crops at least potatoes should be taken into consideration. The per capita amounts of cereals and potatoes combined provide a true picture of the surplus and deficiency, although beside the number of population the density and the distribution of livestock should be taken into account just as well.

From the amount of cereals combined /potatoes not included/ it may be seen that in Central Europe the Great Hungarian Plain, the Roumanian Plain and the Russian steppe region are best supplied with cereals. Their production exceeds 2-5 times the needs being calculated. Especially the Great Hungarian Plain shows large amounts of excess. Smaller spots abundant in cereals are the Little Alföld, the Bohemian Basin, Southern Bavaria and Silesia. Areas lacking in cereals are the mountainous districts everywhere and the marshy regions of White Russia. However, the size of the spots indicating areas in deficiency leads sometimes to wrong deductions. The population of the Bohemian Erz Gebirge, Saxony and Upper Silesia, and their needs too, exceed that of the larger but sparsely populated spots in the regions of the Alps, or in the Northeastern and Southern Carpathians.

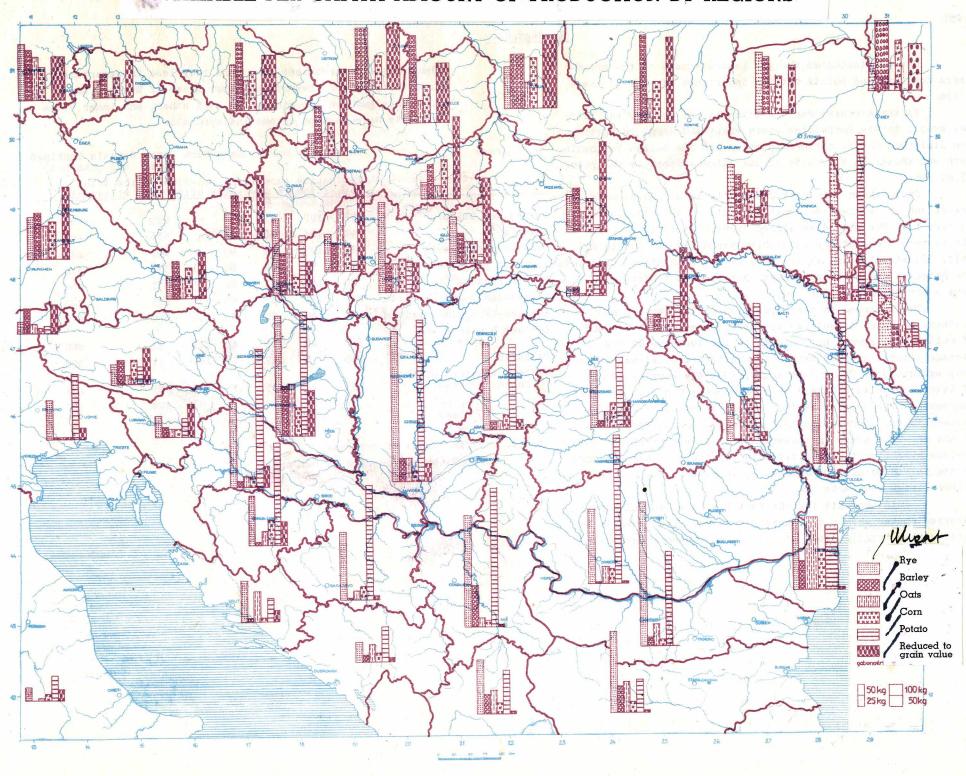
In case the per capita amount includes beside cereals potatoes as well, the former picture does not show essential changes; at most the large surplus of bread-grains of the Great Hungarian Plain and the Russian steppe-regions lose in importance compared to the northern areas. The principal area in abundance remains the Great Hungarian Plain.

However, there are large areas surrounding it in great deficiency; accordingly, the major part of its surplus production of cereals is exported to the peripheries of the Carpathian Basin, as well as to the bordering Alpine regions, and to the eastern German areas. The Roumanian Plain produces cereals primarily to meet its own demands, and neither from here are considerable amounts exported to long distances. The Russian steppe-regions send their surplus of cereals to the central and northern Russian areas.

The entire territory, as a whole, is just supplied. Even in the best years of production there is no great excess to be found throughout the entire territory; neither is an extremely great want in cereals even in the years having a bad production. The areas in excess and in deficiency linking to each other are well located, and this enables them to carry out quite easily the necessary exchange of goods. Especially the Carpathian Basin is in an ideal position; here the peripheries being in needs have the closest and best natural contacts with the central areas in abundance. Even the cereals of the Roumanian Plain find a good natural way to the population of the Roumanian highland areas being in want. The grain-fields of Silesia are also near and can be easily reached from the densely populated mining and industrial regions. Northern Bavaria is lying near to the densely populated areas of Saxony; the Moravian and Bohemian Basins, as well as the Little Hungarian Alföld can easily supply the large cities of these regions.

There is a natural order to be found between the areas being active or passive in the production of cereals. The old political boundaries adapted themselves quite well to this natural order. The new boundaries of 1920 had been drawn in the area of Central Europe exactly there, where they hampered the liveliest and most necessary exchange of trade. This resulted in the economic stagnation of the most productive areas, in the higher prices of the areas in deficiency as well as in the decline of the living standards in both sorts of areas.

AVAILABLE PER CAPITA AMOUNT OF PRODUCTION BY REGIONS



by Regions.

Our map indicates the per capita amount of the breadcrops combined and points out the importance of each of these crops.

In the northern regions potatoes and rye are the leading crops; in the Carpathian Basin wheat and corn; in Northern Italy and in the northern portions of the Balkan Peninsula corn and wheat; in the south of the Balkans wheat is the principal crop.

In Southern Europe production is rather monotonous, beside one or two leading crops the rate of the other products is very low. The most diversified production is to be found in the western areas of the Carpathian Basin: in the Little Alföld, Transdamubia and at the feet of the mountainous districts. The Bohemian and Moravian Basins, Bavaria and Austria too, have a diversified production.

The increase in the population of the eastern and southern regions, as well as the development of the methods of cultivation result not so much in the increase of the average yields, as much rather in the diversification of one-crop agriculture. This means again, that the surplus exports of these agricultural areas is continuously diminishing. The decrease in the surplus production of cereals is due to two causes: to the increase in the population and to the decrease of the one-crop areas in consequence of diversification. The various products of this diversified agriculture are consumed by the inland population increasing in number, but having higher living standards too.

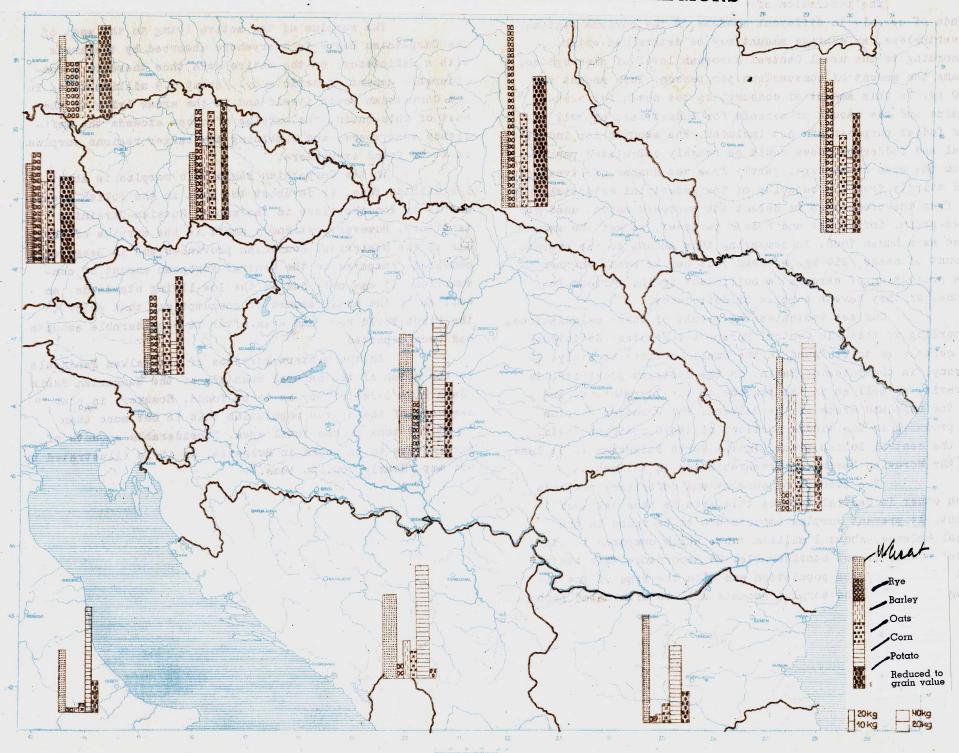
This accounts for the fact that the Central European agrarian states show a decreased purchasing power towards the western industrial states, and they also became industrialised

themselves. Nevertheless, the more they lose in importance from the point-of view of the other areas of Europe, the more they gain in importance for each other, and inner close contacts between them become indispensable.

Areas	Wheat	Rye	Barley	Oats	Corn	Pota- toes		combine tatoes
	Per o	apita ation	amounts in the	year	relat s ofl	ion to 930, in	the to	tal
Suxony and Silesia XX/	76	102	52	:67		681	•	467
Bavaria XX/	. 94	104	76	86		656		520
Bohemia and Moravia	61	103	68	99	-	456		441
Austrian provinces	50	71	36	60	21	375		328
Polish regions XX/	69 .	167	41	-86	. 5	971		608
Carpathian Basin/complete/	227 .	52	65	43	246	275		703
Russian-Ukrainian regions Ancient Roumania and	160	140	80	90	70	590		650
Bessarabia	142	18	108	49	313	91		680
Bulgaria	100	5	7.	17	144	11		303
Western portions of the Balkan Peninsula	153	14	35	26	206	55		444
Italy xx/	57	. 3 -	4	9	98	104		20].

Notes: x//in values of cereals/
xx/ portion represented by our map

AVAILABLE PER CAPITA AMOUNT OF PRODUCTION BY LARGE REGIONS



The population of Central Europe consume different kinds of cereals in different amounts in the various regions. Nevertheless, an average amount may be determined which, according to the usual Central European level of consumption. means the amount of consumption per person. This amount is 250 kg. In this amount of consumption the needs for seedgrains and the amount of cereals for industrial, as well as for fodder purposes are not included. The amounts for industrial and fodder purposes could be roughly calculated partly from the size of acreage, partly from the number of livestock. and thirdly from the capacity of the industrial establishments. If from the production we deduct the supposed amount used for seed-grain, industrial and fodder purposes, we get the amount used as a human food. In comparing this amount to the average amount of needs /250 kg.per head/, it may be seen, whether the production of cereals is sufficient in the various regions, or they have a surplus or deficiency.

Our map indicates the result of these calculations, According to this, in Central Europe the greatest deficiency in cereals is to be found in the small portions of Italy, in Saxony, in the Bohemian Basin, in the Austrian provinces, in Moravia, as well as in the regions of the Carpathians, and in the highland areas of the Balkans. The greatest surplus is produced in the middle portions of the Carpathian Basin, in the central Polish areas, in the North Bulgarian table land, in the Moravian Basin, in Bessarabia and in Wallachia.

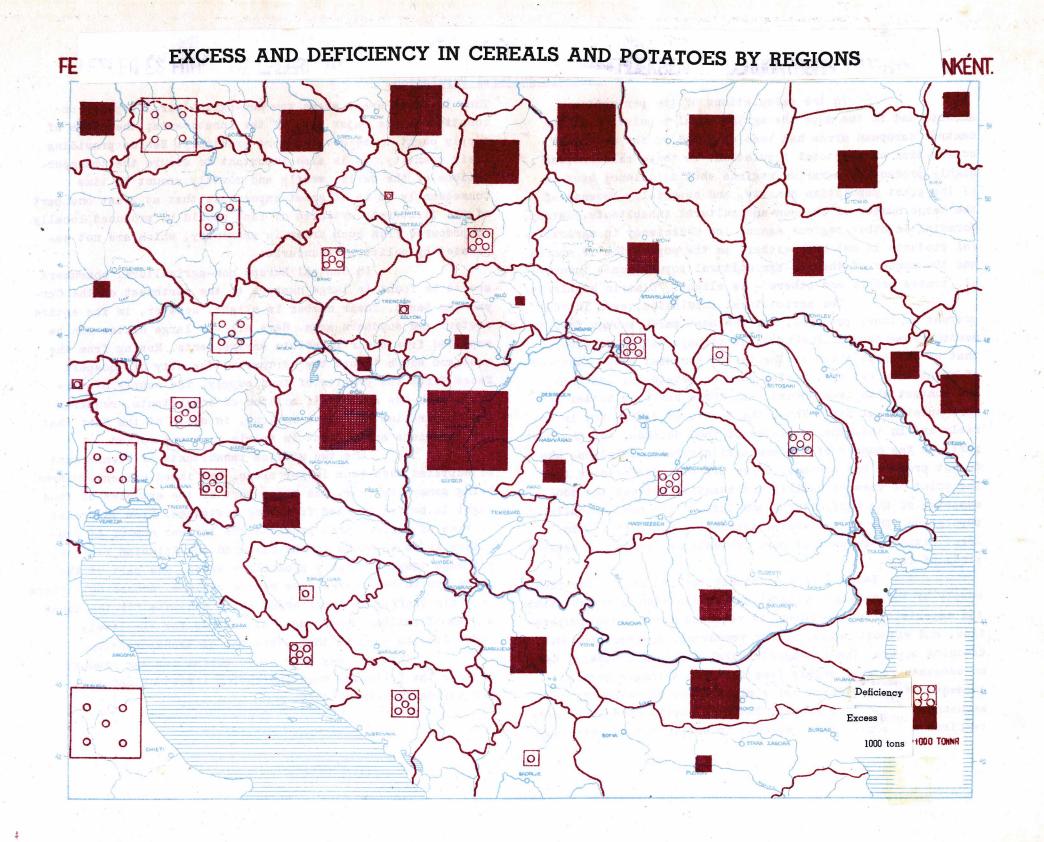
The amounts of surplus and deficiency complete each other in Central Europe; this area is thus self-sufficient. At present surplus amounts are to be found in the final balance, about I million tons, which compared to the total yield, is not considerable. In accordance with the rapid increase of the population and with the rise of the living standards, the surplus amounts will be eliminated probab-

ly within a short time.

The surplus of the active lying to the west of the Carpathian Basin is everywhere absorbed by the areas with a deficiency; on the entire area thus there is a considerable amount of deficiency. /About 0.9 million tons/ In the Carpathian Basin itself and in the areas lying to the east of this basin, the surplus of crops exceeds the deficiency everywhere, and combining the larger regions surplus is to be found everywhere.

In the Carpathian Basin this surplus is about 1/2 million tons. It is about the same in the Polish areas, and it is somewhat less in the mapped Russian-Ukrainian territory. However, extremely small is the surplus of cereals in the historical Roumanian provinces and in Bessarabia combined, compared to the Central European amount of consumption. It was only due to the low living standards, as well as to the small amount of consumption, that prior to the First World War, and even after it considerable amounts had been exported.

In the western portions of the Balkan Peninsula to the south of the natural boundary of the Hungarian Basin /Sava line/, deficiency is to be found. However, in consequence of the sparse population this is not more than 20-25.000 tons in the total area. Considerable amounts of surplus are to be found in Bulgaria, as it is illustrated by our map /Nearly 200.000 tons./.



In the calculations of the per capita amounts and in the maps the agricultural population of the Central European areas had been compared to the amount of consumption of the total population. In these calculations highly productive agrarian regions show deficiency because of the great population density, and especially because of the large number of the non-agricultural inhabitants./Saxony, Moravia/ In other regions again, the deficiency in agricultural products is not high either, as the population is sparse and the number of the non-agricultural population - industrial, trades people and others - is slight. /Dinaric highlands/

The agricultural population, even in the poorest regions, produces, for the most part, enough food to meettheir own demands. Theirfood is perhaps different from that of the population living in the abundant areas /instead of wheat they eat rye, barley, corn or potatoes/, and they are content with less amount than those having a better and more substantial food. Thus, the degree of deficiency in cereals and in the other articles of food depends, for the most part, on the number of the non-agricultural population, who do not produce but consume. There are also differences from the point of view of quality and quantity between the consumption of the agricultural and that of the non-agricultural population. The latter group, especially those fiving in large cities, are usually more pretentious, consuming several kinds of food.

It is a very difficult task to secure the food supply of the non-agricultural population even in normal times and especially in war-times; it requires the precise cooperation, and without delay, of the procuring, transporting and dividing organs. The non-agricultural population namely, has no adequate reserve supply from food for a longer period, consequently a few weeks delay might cause catastrophal consequences in the food supply. The food supply of a large city requires several thousand waggons to set in motion every day.

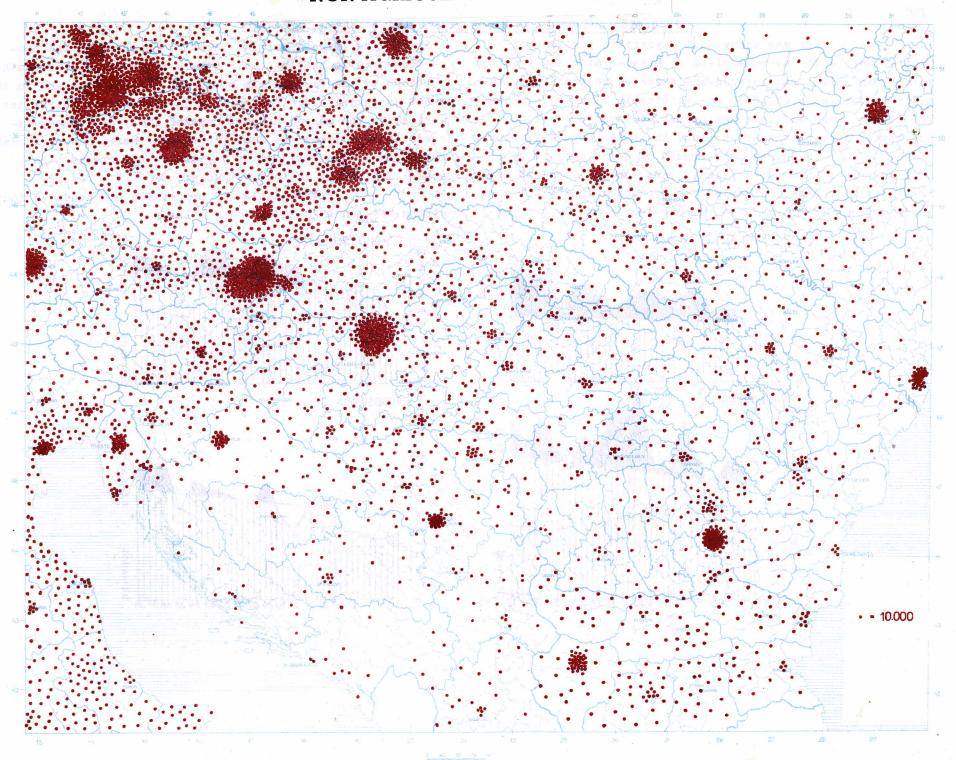
Thus in those areas where the non-agricultural population constitutes the major part of the inhabitants, the needs of supply ought to be covered more precisely. Beside providing their quantity, it is also important to secure the transportations of the daily, weekly and monthly amount in time Consequently it is of great importance that at least one part of the first-rate articles of food should be produced locally or procured from such areas in proximity, which are not separated by political boundaries.

In Central Europe non-agricultural consumers are to be found in large numbers to the northwest of the Carpathian Basin. Their number is slight, however, in the entire eastern and southern area. Here all the large cities can be supplied from their immediate environments. Moving from the east and south toward the northwest, the city of Budapest faces first the problem of food supply. The supply of this city, with one and a half million of inhabitants, requires the cooperation of remote regions, in spite of the fact that her immediate environment is fairly rich and varied.

The two million inhabitants of Vienna must be supplied even from larger areas. Her immediate environment being generally poor, the major part of the articles of food ought to be transported from long distances. From the point of view of agricultural products the largest number of consumers is to be found in the Saxonian and Silesian regions. Although they are highly productive areas, one part of the needs has to be covered from remote regions. Accordingly, there is a big traffic in these areas which accounts for the dense system of railways and roads, as well as for the lively trade passing through them. /See map of transportation/

This map may also prove useful for our readers next to the following maps indicating livestock and the per capita amounts of meat.

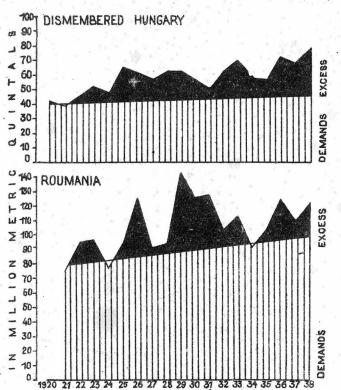
NON-AGRICULTURAL POPULATION



Production and Needs in Bread-grains and Potatoes by Regions.

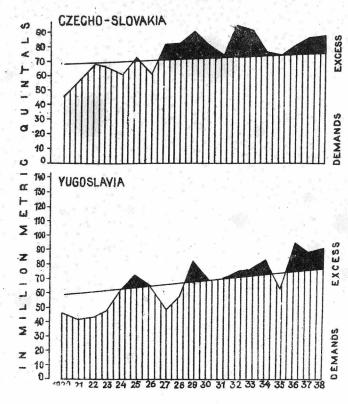
Our map shows that in certain portions of Central Europe the average yield of bread-grains and potatoes to what an extent had covered and exceeded respectively, the needs in the years of 1930. The vertically lined squares and the shaded areas indicate the amount of local production; the latter ones represent surplus, the blank ones deficiency.

In Saxony, the amount of deficiency is as much as that of home production, consequently almost as much bread-grain should be imported, as produced. In the Moravian Basin deficiency constitutes but one-fourth of its own pro-

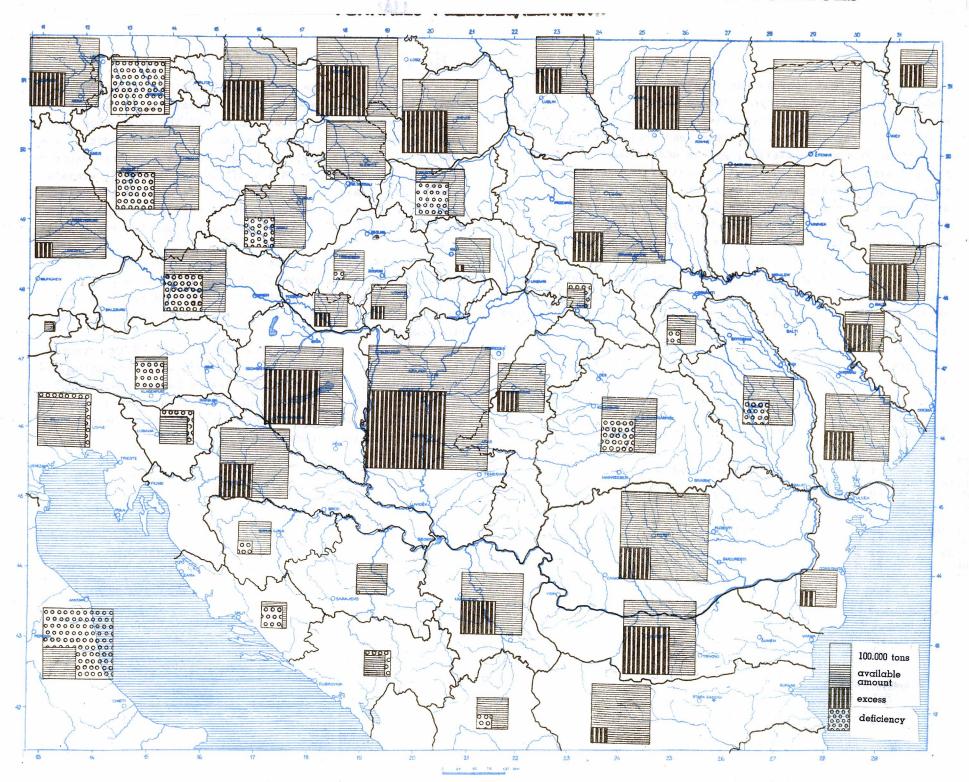


duction. The largest surplus amounts, compared to the production, are to be found in Northern Bulgaria, in the southern portions of the Ukraine, in Hungarian Transdanubia and in the Great Hungarian Plain, as well as in the western Polish territories. In the mapped area of Central Italy deficiency exceeds several times the home production. Here, however, breadgrains have been replaced by vegetables and greens, the actual deficiency is thus not so great.

The formation of production and needs in four states between 1920-1938:



PRODUCTION, EXCESS AND DEFICIENCY OF CEREALS AND POTATOES



Next cereals and potatoes the other plants of arable land are insignificant. Forage crops occupy the largest acreage; in the most advanced areas some 20-22 per cent of the arable land. Various kinds of fodder and root-crops are raised in Central Europe. Vegetables, greens and legumes occupy but few per cent of the arable land in most of the areas, and their rate is considerably increasing around the large cities, as well as in the most densely populated areas./Making up one-fifth of the acreage. /However, they are grouped in different ways in the various countries; it is therefore, impossible to give a uniform illustration.

Of the industrial and commercial plants sugar beets occupy considerable acreage in the areas lying to the north and west of the Little Hungarian Alföld. Here a developed sugar industry is to be found everywhere. The amount of sugar consumption is characteristic of the living standards of the population. In advanced areas usually more sugar is consumed than in regions with low living standards.

Average sugar consumption per head in kilogram s in 1935-36:

Big consumer	9:	Central European	states:
Denmark England Australia Sweden U.S.A. Canada Switzerland Norway Argentine Belgium	55.9 54.6 49.8 48.8 47.9 49.9 36.1 31.3 29.8	Austria Czecho-Slovakia Germany Hungary Poland Italy Jugoslavia Roumania Bulgaria	26.3 26.1 25.0 12.1 11.5 7.9 5.4 5.0

The statistics of sugar production and consumption show, like sensitive scales, the fluctuations in economic conjuncture, and the good or bad lot of the population. Austria's sugar imports in 1935 diminished to the one-hundredth of the level of 1926-30 /in 1935 7.000 q/. Poland's exports decreased to its one-third /in 1935 1 million q/ Czecho-Slovakia's exports diminished to the same extent /2 million q/. Hungary's exports decreased to the one-seventh during the same period. /In 1935 127.000 q/. Jugoslavia's exports and imports ceased as well.

This crisis was due to the economic conditions of the Central European states. All over Europe the level of both sugar production and of consumption declined but to a small extent between 1929 and 1935. In the Soviet Union, however, it amounted to its double.

Tobacco is another industrial plant of importance. It is raised in the southern and eastern areas occupying everywhere but small fractions of the arable land. Tobacco produced in Central Europe is of different qualities; accordingly, it is difficult to make an international comparison between the yield and the average production.

			Average yield q/ha	Production	ugar Imports 000 q	Exports	Production 1000 q	T o b a c Average yiel q/ha	d Imports	Exports
Austria	28	7.187	256	999	1.005	5	-		138	9
Poland	209	43.870	210	6.439	42	2.695	57	14.4	147	4
Czecho-Slov	akia 256	66.556	260	9.709	12	6.572	80	13.0	155	3
Hungary	70	14.812	213	1.913	5	865	295	13.1	36	73
Roumania	64	10.672	167	1.328	. 6	66	208	6.8	2	6
Jugoslavia	48	7.925	164	943	54	43	110	8.1	4	20
Bulgaria	19	2.722	145	370	3	28	249	8.4	_	239
Combined:	694	153.744	16.	21.701	1.127	10.274	999		482	354
Germany	446	116.740	262	17.522	649	1.949	204	22.9	966	5
Italy	102	26.293	257	3.364	461	50	445	11.3	61	33
Soviet-Unio	n 756	94.380	125	11.335	715	1.100	1.340	15.0	20	91

Of the textile plants hemp and flax, and in Bulgaria and Macedonia cotton are produced; they are insignificant everywhere.

1 9 2 6 / 1 9 3 0 .

5.346

2.345

3.942

2.260

1.172

Hemp fibre Flax fibre Cotton Production Imports Exports Production Imports Exports Production Imports Exports 1000 q 1000 q Austria Poland 1.186 Czecho-Slovakia Hungary Roumania Jugoslavia Bulgaria

++/

3.260

Note: +/ In 1935 37.000, In 1936 45.000 q ++/ In 1933 31.000, In 1936 298.000 q

. 23

_+/

Combined:

Soviet-Union 3,109

Germany

Italy

In Central Europe the producing of fruits and especially that of grapes is of much greater importance. The acreage of grapes is considerable everywhere in the southern states; there are no grapes to be found in the north of Hungary being the northern border of the grape-producing regions. The Carpathian Basin with its peculiar location is the most northern grape-producing area on our continent. Grapes are raised everywhere in the area of this large basin; however, most of them are grown on the southern slopes of the inner volcanic ranges, as well as in the low hill districts and in the sandy soils of the plains. Hungary produces first-class wine as well.

It is hard to determine statistically the amount of fruit-production. The agricultural statistical data concerning the spread of orchards, the number and sorts of fruit-trees, and the yields of production are utterly approximate and are far less reliable then the similarly accurate data of the other products. Fruit-growing is one of the most profitable productions. Fruits are of considerable importance in food supply too and their consumption is spreading more and more among the urban and rural population alike. At the feet of the highland areas facing south at a height of 200-500 m /sometimes even higher/ actual fruit-belts are to be found

A natural fruit-belt is running along the feet of the Eastern and Southeastern Carpathians in the area of Moldavia and Muntenia. This belt may be found even within the Carpathian Basin in Transdanubia, on the slopes of the Northern Highlands facing the Little Alföld and the Great Hungarian Plain, and in Transylvania. Beside the orchards of the highlands fruit-growing is carried on to a large extent in the sandy soils of the plains.

1926/30.

	Acreage of vineyards 1000 ha		Yield of wine-grape q/ha	s gra	Exports	mports	ne Exports O hl
Austria	37	_		81	1	407	1
Poland		_	-	24	_	41	
Czecho-Slova	kia 17	391	31.7	22	2	271	
Hungary	219		8.5	_	58	2	171
Roumania	272	10.799	51.1		14	7	8
Jugoslavia	179	9.156	-		19	1	73
Bulgaria	81	2.910	61.4	-	13		19
Combined:	805	23.256	_	127	107	723	272
Germany Italy Soviet Union	81 1.500 202	63.177 9.715	42.1	596 1 1	291 5	958 15 1	.903 28

The data concerning the acreage and yield of the vineyards are rather unreliable. Grapes are grown together with other fruits an many places; some parts of the vineyards, however, are not productive in some years. The statistical data of the yields are still less reliable. They are drawn up with different methods in the various states; some do not even give any statistics of production. Beside dessert grapes and wine there is a considerably big traffic in dried grapes and raisins. The Central European states /beside Germany, Italy and the Soviet Union/import more than 100 thousand quintals of dried grapes per year, Germany another half a million quintals.