

Livestock-raising.

Livestock-raising had been once an economic activity almost quite independent from farming, and it meant a special form of living in the steppe and savana-regions. Later it became more and more combined with farming through stable-work, forage production and meadow-culture. By draining the meadows, regulating the rivers and restricting the fallows to narrower areas or even eliminating them, the natural pastures disappeared and the possibilities for an extensive livestock-raising ceased. In consequence of the changed breeding conditions animals had undergone great changes in quality too.

The change was the greatest perhaps in the cattle stock, as cattle raised for meat and hide had to be replaced by cattle primarily raised for milk. Milk consumption has spread all over Europe, as well as the United States to such an extent that milk and dairy production became the most important items in world trade. According to the international statistics, in 1938 milk led with a value of 24 milliard marks among the raw materials and goods so important in world trade; coal with a value of 16 milliard marks, took but the third place; wheat with 12 milliard the seventh. The thirteenth place in the list of precedence was taken again by butter with a value of 5 milliard marks; it was followed by wool and cotton with 3 milliard but far on the twentieth place. /Compas Finanzielles Jahrbuch, 1941. Wien./ The increased importance of milk required the development of cattle-stock on a large scale and the raising of special breeds with a high yield of milk.

At the same time with milk consumption rises the meat and fat consumption of the population as well, and to such an extent, as the cooler climate zones get populated, and where the natural conditions and the way of living require a more substantial food abundant in meat and fat. The

importance of meat as a human food is evidenced by the fact that among the most important goods in world trade it ranks second after milk in value, but preceeds all the other food plants, mining products and articles of industry. Cattle are of the greatest importance in meat supply too, where it is followed by swine. From the point of view of fat supply this latter is unique. In warm areas fat used for human consumption is replaced by vegetable oil, and in the cool coastal areas eventually by fish-oil. However, the only source of fat for the people of the cool, temperate climate zone /beside the considerable amount of poultry/ is produced by swine.

The consumption of horse-flesh and mutton is not so common as that of beef or pork. Horses for draft purposes had also lost in importance in consequence of the spread of railways and the motorisation of agriculture; accordingly, their stock is decreasing everywhere. Sheep are raised primarily for wool and not for meat. As an animal for meat they will be gradually crowded out, their stock is decreasing. Sheep remained in largest number on the Balkan Peninsula and in the warm steppe-regions.

Livestock-raising is in most cases more profitable than plant growing. Thus, in intensively cultivated areas cereals are crowded out by forage-crops. In the areas with highly productive natural pastures /elevated humid highland areas or flood areas/, where relief conditions are not favourable to the cultivation of arable land, meadow farming and intensive stock-raising make up the principal source of income of the agrarian population. In Central Europe livestock-raising is most highly deve-

loped in the Alpine provinces. A large animal-stock results in a large quantity of manure; it is thus a great help to plant-growing.

Beside cattle, swines, sheep and horses we have no other big animals spread in similar proportion. The number of poultry is considerable; however, the statistics, as regards poultry, are quite unreliable; besides, they do not play such an important part in the food supply of huge masses, as cattle or swines do.

Neither the amount of livestock, nor its importance relating to the total population give a proper information about the development of livestock-breeding by regions. The amount of livestock should be compared to the agricultural population. These data rather modify the picture given on the basis of livestock-maps. For example, in the maps indicating the spread of cattle or swines, the Bohemian Basin stands out of the bordering areas by its scantiness of animals.

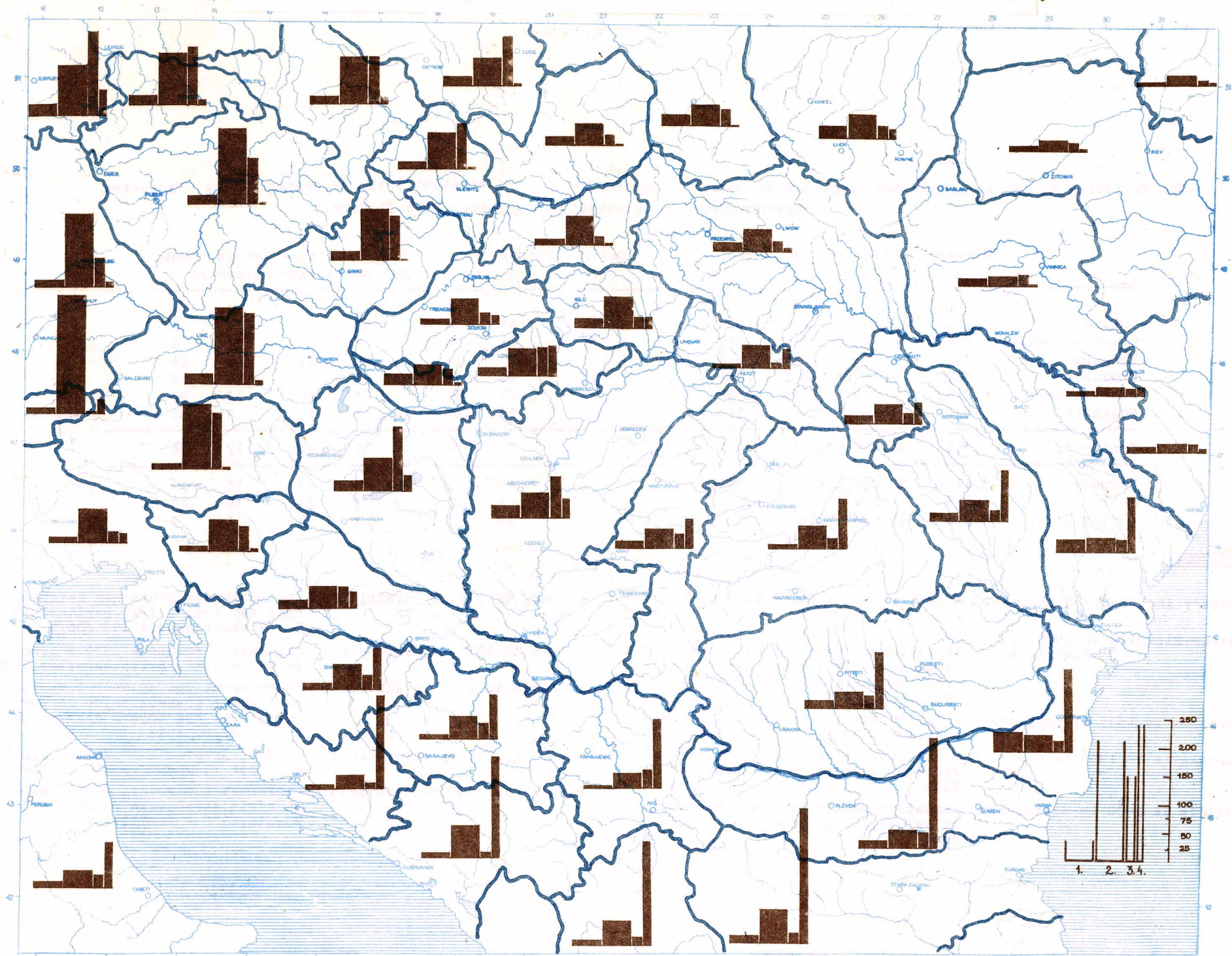
In comparing livestock to the number of the agricultural population, it may be seen that in Saxony the number of cattle was 92 per 100 agricultural inhabitants, in Lower Silesia 84, in Upper Silesia 65, in Bavaria 131, while in the Bohemian Basin 135. This proportional number is not surpassed even by the rich cattle-breeding areas either, they just reach it. /135/ The picture of swine-raising is modified just as well. In the areas of the Great Hungarian Plain abundant in swine only 83 swine fall to 100 agricultural inhabitants; at the same time their rate in the regions of Graz and Klagenfurt is 102, in Lower and Upper Austria 124, in the Saxonian provinces 150, in Hungarian Transdanubia 114.

The backwardness of livestock-breeding in the Eastern European areas is far better evidenced by the data. Here the population in an overwhelming majority

is engaged in agriculture; yet, their livestock is low. These old natural livestock-raising areas /grassy steppes/ kept their livestock-raising character so far, as a considerable part of the population makes his living by stock-raising, respectively a considerable part of their income and livelihood comes from livestock. As regards the absolute number of animals and especially of the livestock per person engaged in agriculture, they are by far surpassed by the western areas.

The number of horses and cattle is illustrated in our map by columns being broader four or five times respectively, than those of the swines and sheep, according to the difference in weight and value existing between the animals mentioned above. Thus the columns of horses, cattle etc. can be compared not only to each other, but the total area of the columns of one region may be measured to that of the columns of the others.

Cattle constitute the major part of the livestock raised in the Alpine regions of Central Europe. In the Carpathian Basin the number of swines and horses approaches that of the cattle; the situation is the same in the Polish regions. In the Balkan states the number and rate of sheep is the highest; however, in the steppe regions around the Black Sea the number of domestic animals in each group is very low, having no sheep at all.



1. LO

1. Horses

2. Cattle

3. Swines

4. Sheep

UH

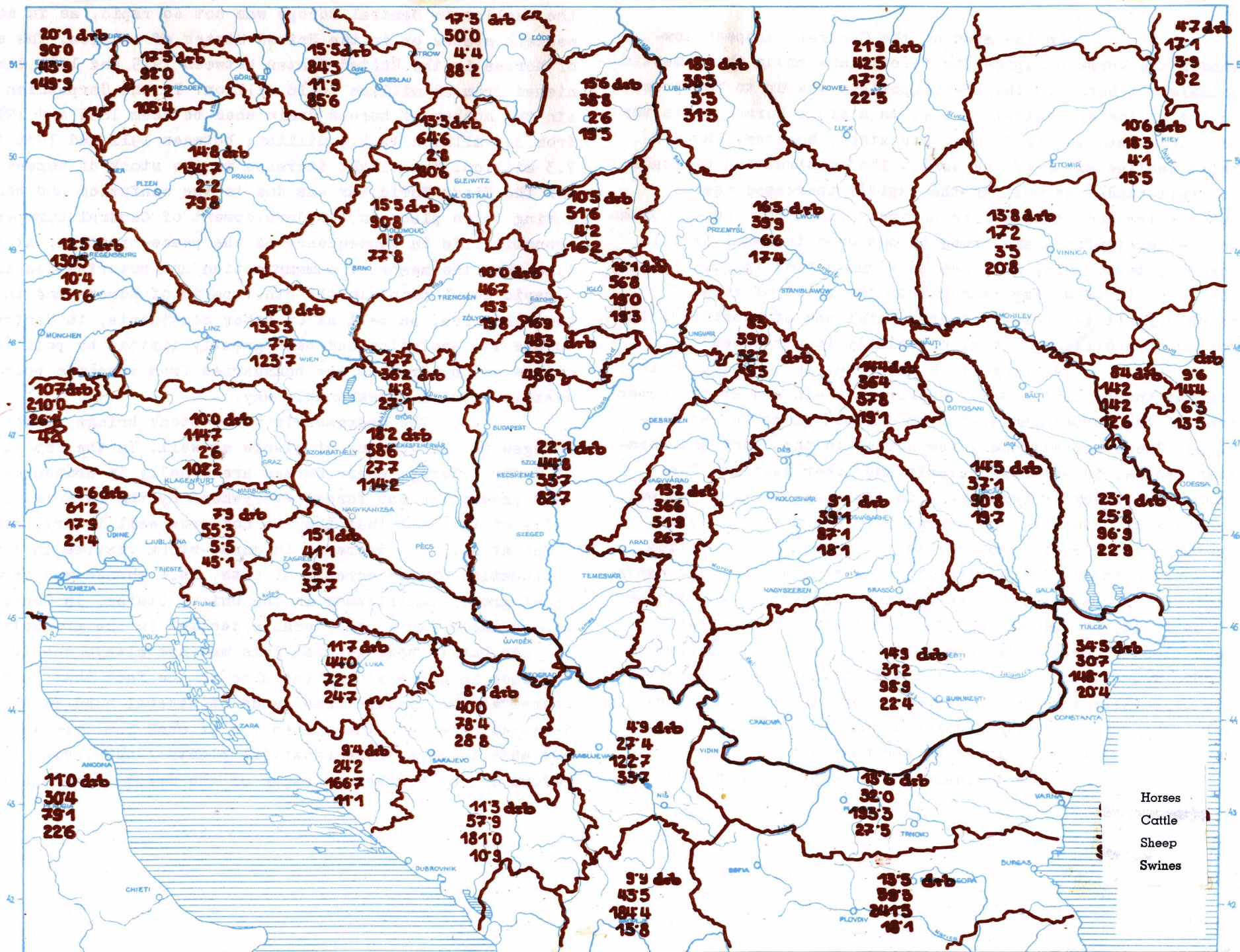
The following Table represents the livestock by countries during the period of about 1936, according to the "Annuaire International de Statistique Agricole, 1936-37, Roma."

| | Horses | Cattle | Swines | Sheep | Horses | Cattle | Swines | Sheep | Horses | Cattle | Swines | Sheep |
|-----------------|---------|--------|--------|--------|--------|--------|-----------|-------|----------------|--------|--------|-----------|
| | 1 0 0 0 | | | | per | 1 0 0 | s o u l s | | per one square | | | kilometre |
| Austria | 246 | 2.596 | 2.872 | 316 | 4 | 38 | 43 | 5 | 3 | 31 | 34 | 4 |
| Poland | 3.824 | 10.200 | 7.060 | 3.024 | 12 | 31 | 22 | 9 | 10 | 26 | 18 | 8 |
| Czecho-Slovakia | 704 | 4.595 | 3.242 | 592 | 5 | 31 | 22 | 4 | 5 | 33 | 23 | 4 |
| Hungary | 794 | 1.734 | 2.554 | 1.350 | 9 | 20 | 29 | 16 | 9 | 19 | 28 | 15 |
| Roumania | 2.025 | 4.171 | 3.030 | 11.809 | 11 | 23 | 17 | 65 | 7 | 14 | 10 | 40 |
| Jugoslavia | 1.216 | 4.074 | 3.126 | 9.568 | 9 | 29 | 22 | 69 | 5 | 16 | 13 | 39 |
| Bulgaria | 532 | 1.498 | 902 | 8.840 | 9 | 25 | 15 | 145 | 5 | 15 | 9 | 86 |
| Combined: | 9.341 | 28.868 | 22.786 | 35.499 | 9 | 29 | 23 | 35 | 7 | 21 | 17 | 26 |
| Germany | 3.410 | 20.088 | 25.892 | 4.341 | 5 | 31 | 40 | 7 | 7 | 43 | 55 | 9 |
| Italy | 815 | 7.234 | 3.187 | 8.601 | 2 | 17 | 7 | 21 | 3 | 23 | 10 | 29 |
| Soviet Union | 15.900 | 47.500 | 20.000 | 46.000 | 9 | 28 | 12 | 27 | 1 | 2 | 1 | 2 |

SOURCES:

- 1/ Hungary in 1935 by districts: Magyar statisztikai Közlemények. 100.köt.
- 2/ Czecho-Slovakia in 1935 by districts: Mitteilungen des Statistischen Staatsamtes der Cechoslovakischer Republik. Jahrgang XVI./1935/ Prae. 1935.p. 317-329.
- 3/ Roumania in 1935 by counties: L'Agriculture en Roumanie. Atlas statistique. Bucuresti, 1938.
- 4/ Jugoslavia in 1939 by districts: Statistique agricole annuelle /production, exportation, importation/ 1939.
- 5/ Austria in 1930 by districts: Landwirtschaftliche Betriebszählung in der Republik Österreich vom 14. Juni 1930.
- 6/ Germany in 1935 by districts: Statistik des Deutschen Reiches. Band 490. Teil 1.B/10. Berlin 1937. Die Viehwirtschaft 1935/36.
- 7/ Poland in 1933 by districts: Statystyka rolnicza 1933. serjac. zeszyt 8.1.42. B.145. Warszawa, 1934.
- 8/ Bulgaria in 1934 by districts: Recensement des animaux domestiques des ruches d'abeilles, de la sericulture et des moyens de transport 1934. Sofia, 1942.
- 9/ Italy in 1930 by departments: Catasto Agrario 1929. Volume Riassunto per il Regno /Parte II. Tavole/.
- 10/ Ukraine in 1935 by districts: Cislennost i porodnii sostav skota po administrativnim rajonom S.S.S.R. Moskva, 1936.- Tom. II. 1-4.

NUMBER OF DOMESTIC ANIMALS PER 100 AGRICULTURAL INHABITANTS



In the eyes of the Central European lowlander the horse occupies the first place among the domestic animals. It has been the most important one up to the present in the plains of Central Europe. As a draft-horse, it is the best help-mate to the farmer. Its stock, however, shows a rapid decline all over the world. The construction of roads and rail-roads, as well as the rapidly increased use of automobiles and other motors entirely limit the use of horses in distant traffic, and crowd it out even in local traffic more and more. Being not used as a human food in most places, the horse is of no importance from the point of view of foodstuff. It is, however, very useful and of subsidiary importance in critical times, especially in war-times.

A large stock of horses is to be found in Central Europe in the Great Hungarian Plain and at the outer feet of the Carpathian arc, from Galicia on as far as Dobrudja. There are extremely few horses in the Czech and Moravian Basins, in Northern Bavaria and Lower Austria. The number of horses is very small in the highland areas as well; considering, however, the sparse population of this area, the stock of horses, compared to the number of population, is not too small. In the densely populated western and north-western regions, where there are many good roads and cities to be found, and where traffic is much bigger, the heavy, cold-blooded horses are in majority, while in the plains the light, warm-blooded types. In the highland areas the horses are of smaller size, but they are tough and bear fatigue well. The horses in the highlands and lowlands of Central Europe are also as military horses noteworthy.

The decrease in the stock of horses in

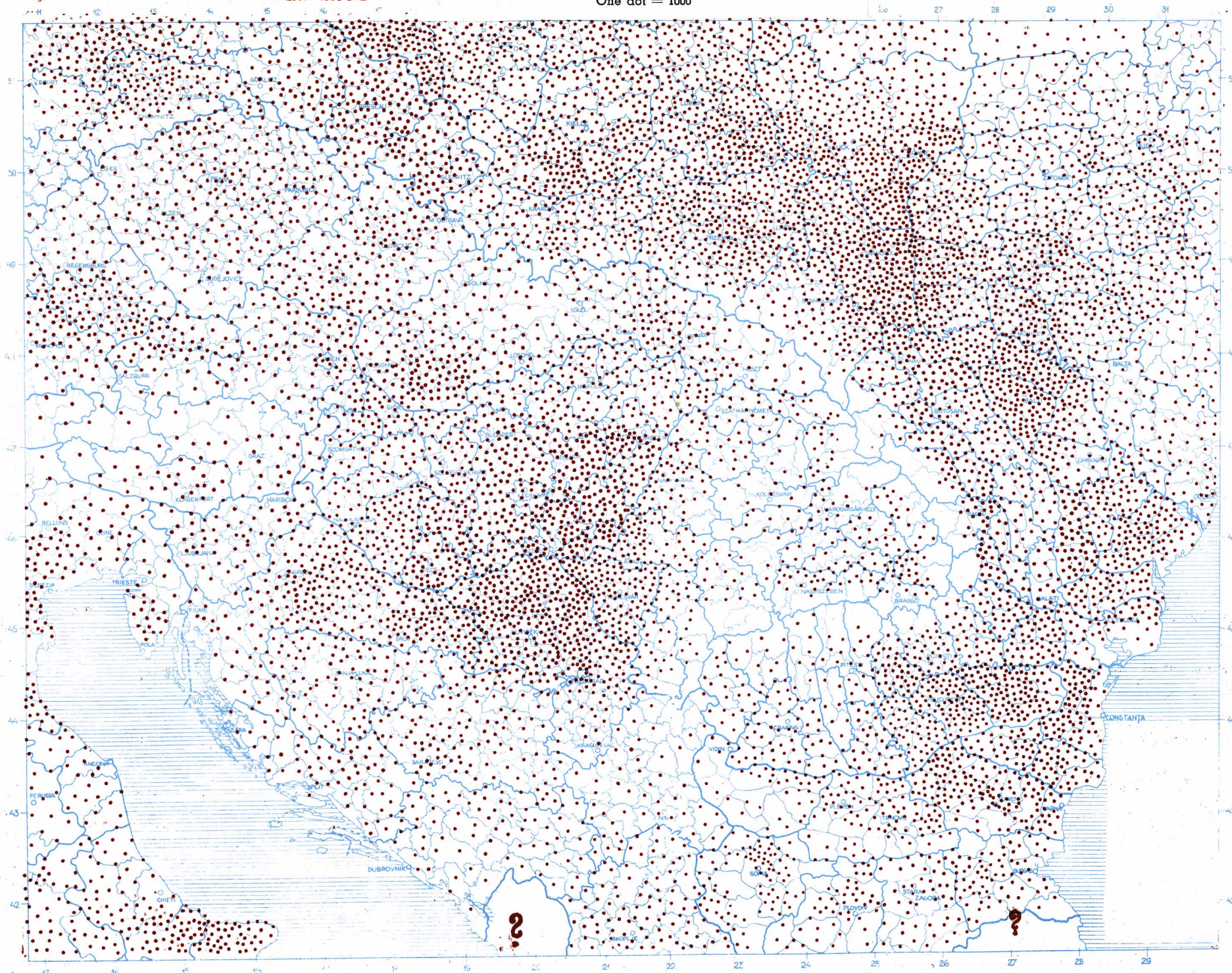
Central Europe keeps pace with the development of the conditions of communication, as well as with motorisation. Thus the decline in Central Europe was not so rapid, as in some western states or in the United States of America. The stock of horses in the United States between 1919 and 1931 diminished from 26 million to 18 million. In the Carpathian Basin the number of horses diminished between 1895 and 1911 from 3.2 million to 2.4 million; between 1911 and 1935 to 2.3 million. The slight decrease in the stock of horses after the First World War was due to the confusion and changes having taken place in the development of Central European economic life in consequence of the peace-treaties. At a time when the means of communication and motorisation showed a rapid development in the other parts of Europe and in North America, as well as on other continents, in Central Europe the evolution had been greatly limited by political crises and by drawing new boundaries from economic point of view in a quite unreasonable way.

The decrease in horse-stock brings forth changes in the growing of plants as well. In the dry plains of Central Europe where horses are usually in abundance, oats production was forced everywhere by the farmers, in spite of the fact that they do not grow well in dry, warm areas at all. The decrease in horse-stock results in the diminuation of the acreage of oats. This change was especially of great significance in the United States. In Central Europe there was a considerable decline in the production of oats but in some places. This was not always due to the decrease in horse-stock, but also to the fact that in the course of the land-reforms lands of several hundred thousand hectares came into the possession of such families who were not able to grow those sensitive plants /Jugoslavian land-reform in the southern portion of the Great Hungarian Plain/

LÖ ALLOMÁNY.
1 PONT = 1000 DRS.

STOCK OF HORSES (ABOUT 1935)
One dot = 1000

PFERDEBESTAND
1 PUNKT = 1000 STUCK



Beside vegetables animal food-products play an important part in human food-supply. Much meat is consumed especially in the regions of moderately cool and cold climate. From the point of view of meat cattle are the most important of the domestic animals. Their number /poultry not included/ is the largest all over the world. They are raised not only for meat, but in the densely populated regions also for dairy purposes, as today milk and the other dairy products are first-rate food-stuffs. Cattle are also used for draft purposes; their manure as natural fertilizer is essential in agriculture, their hides and hair serve first-rate raw-materials as well.

In the western and northwestern portions of Central Europe we find a very high-grade cattle-raising. The southern sections have not so large numbers of cattle, here rather swines are preferred. Cattle are especially plentiful on the northern slopes of the Alps, in Bavaria and in the Austrian provinces. The animal population is very dense in Saxony, on the western slopes and at the feet of the Bohemian Erz Gebirge, viz. in general in the highland areas abundant in rainfall, where the rich natural pastures, as well as the production of fodder and forage crops favour the intensive breeding of animals. In general, it may be said, that the density of cattle population corresponds to the aspect of the population density. In this respect the middle and southern portions of the Carpathian Basin make an exception, where beside an average population density that of the cattle population is rather low, they are replaced by a large stock of swines.

About the year of 1935 in the states of Central Europe the average number of cattle was 290 per thousand inhabitants. At the same time in Europe, the whole average was somewhat lower, roundly 280. The cattle stock in relation to the number of the population is the smallest in Italy; it is rather small in Dismembered Hungary too. In Austria, Poland, Czecho-Slovakia and Germany having a high population density though, more than 300 cattle were numbered /in Austria 384/ per thousand inhabitants in 1936.

From the point of view of breed and quality there are great differences between the cattle of the

Central European areas. The Central European and Balkan breed of cattle, as well as those of the Great Hungarian Plain, in general are of light weight and bony, with a small yield of milk. As regards food, they are unpretentious; they are strong, however, and good for work. At several places even the cows are yoked. In the western and northwestern sections pure-bred cows of heavy weight with a high yield of milk are preferred. These western types, however, spread continuously towards the east and southeast. In the Hungarian portions of the Carpathian Basin cattle of this western type are already predominant. /More than 80 per cent/.

The cattle stock is on the increase all over the world. This is due to the growth of population, as well as to the rise of the living standards, which is a consequence of the cultural and economic evolution of the broad masses of people. In Central Europe the stock of cattle had diminished during the First World War, and it continuously decreased in the period between the First and Second World War. There is no denying the fact that this was due to the impoverishment of the population and to the stagnation in economy. In 1910, in the territory of the Austro-Hungarian Monarchy, and in that of Roumania and Serbia there were 18.7 million heads of cattle; in the same area - which includes the major part of the territory represented by our map of Central Europe - during the period between 1931 and 1935 there were on an average 16.6 millions.

In 1910, there were 346 cattle per thousand inhabitants, in the beginning of the thirties 257. This decrease of cattle stock is all the greater, and illustrates the absolute confused situation of economic life, as the increase prior to the First World War had been very rapid. In Historical Hungary occupying the entire Carpathian Basin in 1870. 5.2 million cattle were numbered. In 1895 6.7 million, in 1911 7.3 million, and in 1935 6.0 million. The break in the development began with the First World War.

SZARVASMARHA ÁLLOMÁNY

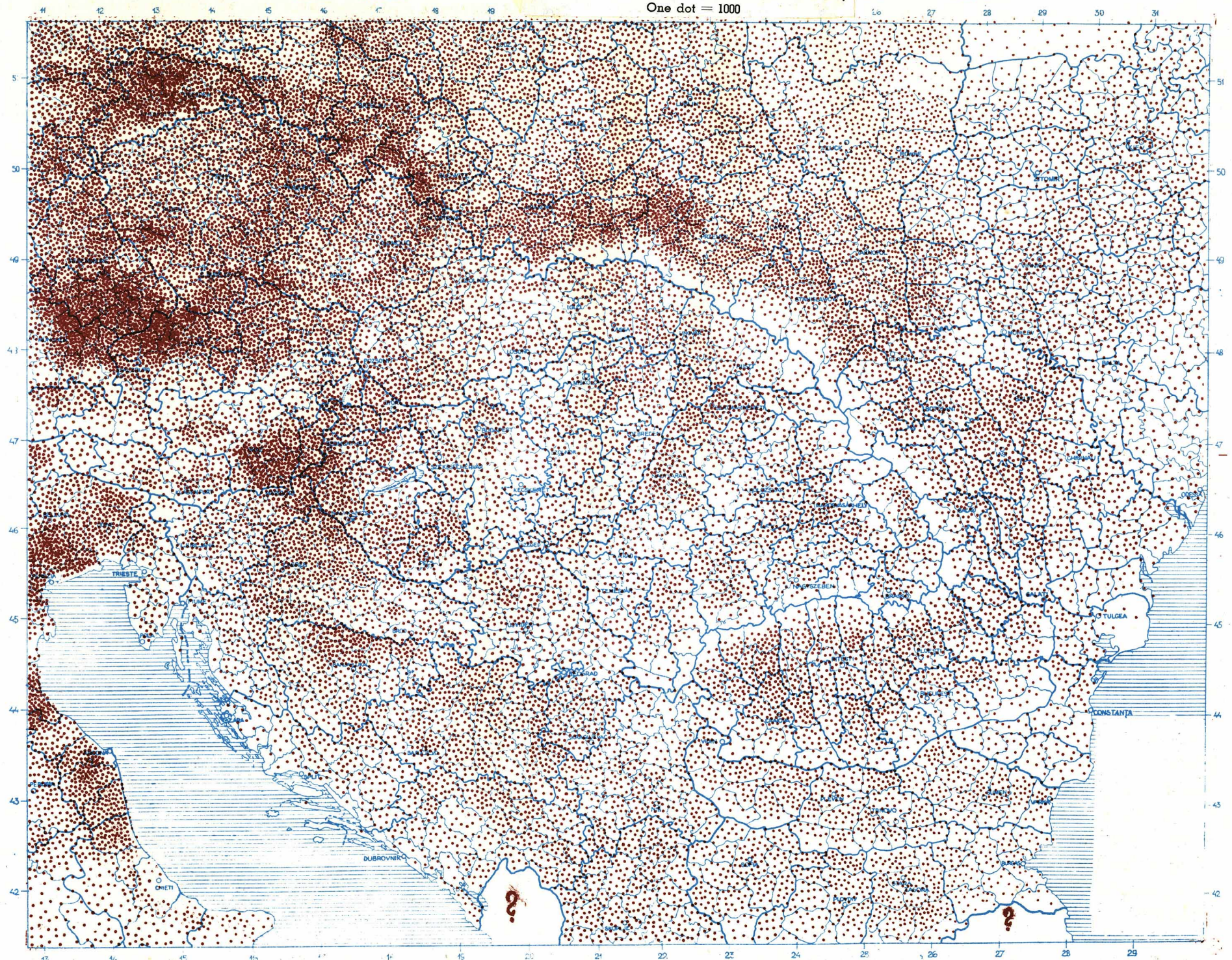
1 PONT = 1000 DRB

CATTLE STOCK (ABOUT 1935)

One dot = 1000

RINDVIEHBESTAND

1 PUNKT = 1.000 STÜCK



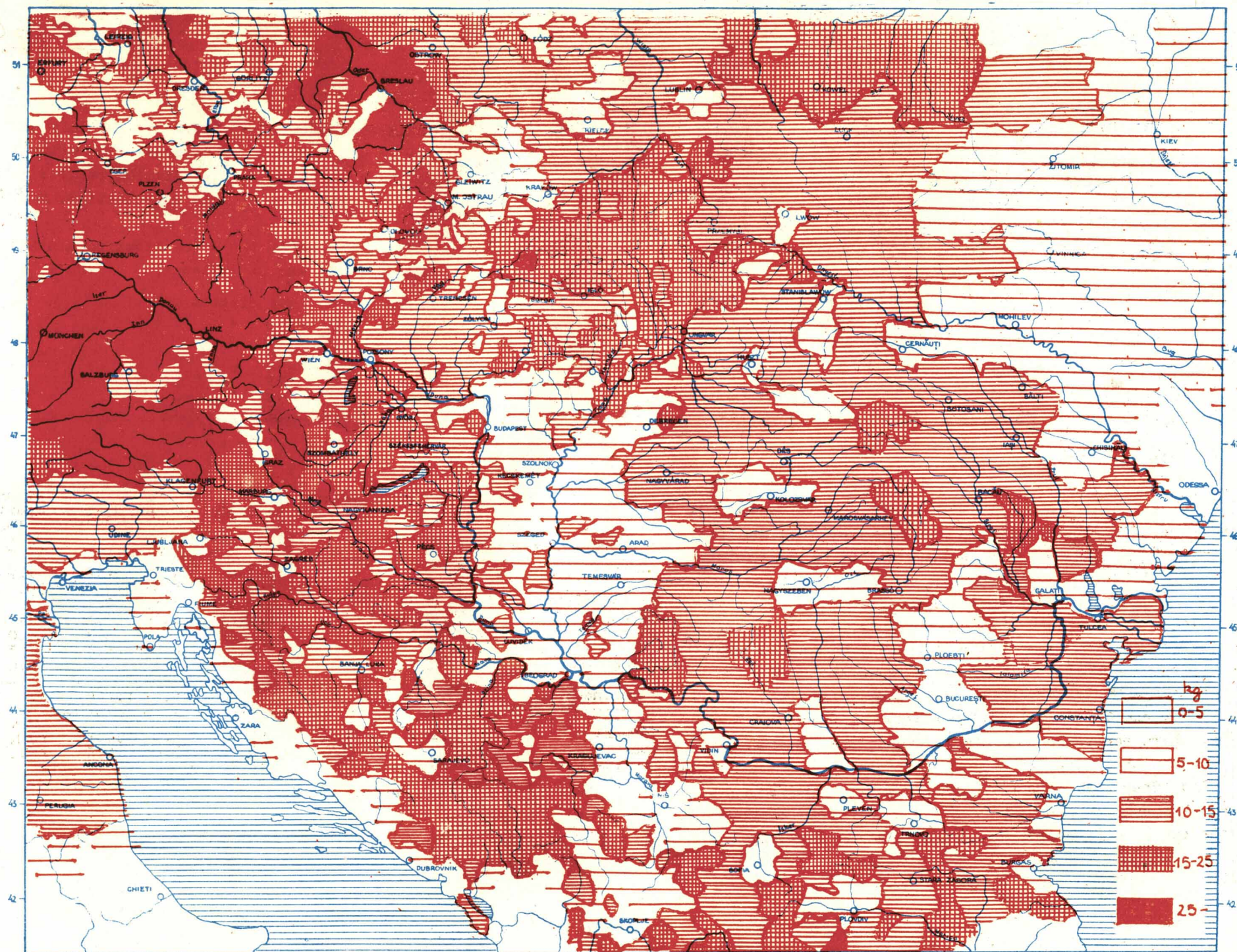
The amount of beef available for home consumption or for export purposes - without diminishing the stock - may be easily calculated from the data of the cattle-stock. To make these calculations we must know the probable annual increase of the stock, the dressed carcass weight of the animals and the percentual rate of meat-weight covering the demands of consumers. Thus, comparing the available quantity of meat to the number of the inhabitants per districts or counties, we get those values which indicate where the inhabitants have an excess or want of meat, or are scarcely supplied with it.

In order to determine it, naturally, we must know how much meat has been consumed per person on an average. The demand for meat changes according to the regions. It changes too, in accordance with the living standards and the economic conditions of the people, and with the fact that in some sections less beef and more pork or mutton is consumed, and in some other regions again the beef-consumption is larger. The average consumption of each country may be calculated from the data of the livestock, as well as from those referring to foreign trade in animals and meat-products. According to the calculations of about 1935, in Dismembered Hungary 7.5 kg, in Roumania 9.5 kg, in Jugoslavia 12.1 kg beef had been consumed a person. The consumption of beef in Hungary, compared to that of Roumania and Jugoslavia, is small, as there the consumption of pork surpasses more than twice that of the other two countries.

According to the calculations performed in the territories of Central Europe, the average annual consumption of beef has been about 10-15 kg a person. Where the livestock is sufficient to produce this amount of dressed carcass weight and meat weight respectively, in relation to the number of the inhabitants, the demand of the population is covered. In case of deficiency, imports are required, in case of excess, there are possibilities for exports.

Especially striking is in the map to find a deficiency in meat in the rich grain-producing regions. It may be seen, how the rich grain-producing and livestock-raising territories depend economically on each other. In the northwestern portions of Central Europe the very dense population absorbs the amount of beef produced by the livestock. This may be said especially of Saxony, Upper Silesia and the environment of Kraków, where the population, despite of the large number of cattle, is in want of beef and depends on imports. In the Austrian provinces and in Bavaria, however, owing to the great abundance of cattle and a less dense population, a large beef-surplus is to be found. Vienna and her environment, however, absorb the surplus and make further imports necessary. The per capita amount of beef is rather high in the Balkans; it is due, above all, to the sparse population and to the fact that this area is more suitable for cattle-raising than for the cultivation of soil. In the Carpathian Basin the Great Hungarian Plain and especially the cities lying in the plain and at its edge are in want of beef and depend on the exports of the hilly and highland areas surrounding them. Their demand for beef is mostly covered by Transdanubia and the Northern Highlands, where in relation to the number of the population there are very large numbers of cattle. Even the Transylvanian territory, though being poor from agricultural point of view, is able to supply itself with beef.

Our map represents territories with an excess and want of beef, but it does not give them in weight and quantity. The few thousand inhabitants of a district in want of beef might be represented in the map by the coloured spots perhaps of the same size, as a city with inhabitants of millions. In order to give a proper and more precise information, the per capita amount of beef had been calculated by regions also from the point of view of quantity.



The Stock of Swines.

Of the domestic animals beside cattle and sheep swines are raised in the largest number in world's relationship. From the point of view of food-supply swines are of more importance than cattle. Due to their prolificness, the weight adequate to that of the total stock may be used annually for consumption without diminishing the stock. In case of cattle the annual increase for consumption constitutes some 38 per cent of the stock.

Swines are chiefly raised in Europe and in North America. Nearly one-third of the world-stock of pigs is to be found in Europe. /Cattle constitute in Europe nearly one-fourth of the world's live-stock/. The European swine-stock population may be divided into two parts: in the corn-producing regions swines are raised chiefly for fats; where corn does not grow, for meat purposes. As regards breed, both groups may be subdivided.

In Central Europe there are important areas where fat and meat-producing swines are raised. In the German and Czech regions swines are raised for meat; they are in great abundance especially in Silesia, Saxony and in the northern foothills of the Alps. The raising of fat-producing swines is carried on chiefly in the Great Hungarian Plain and in Hungarian Transdanubia. In the map representing the swine-raising areas, these two regions appear like islands among the surrounding highland areas poor in swine. In the fat-supply of the Central European territories the Great Hungarian Plain and Transdanubia play a very important part. In the southern portions of Central Europe, thus in Italy and far more in the Balkan states, a small stock of swine is to be found. They are in larger numbers only in the Sava and Morava Valleys. In general, due to the climatic conditions, in the south less meat is consumed, and fat is mostly re-

placed by oil.

The swine-stock population is the only one in Central Europe which showed an increase even after the First World War. The growth of population results consequently in the increase of this unpretentious domestic animal.

The increase of the swine-stock population in the Carpathian Basin was as follows:

| | |
|---------|-------------|
| In 1857 | 4.5 million |
| " 1870 | 4.4 " |
| " 1884 | 4.8 " |
| " 1897 | 7.3 " |
| " 1911 | 7.1 " |
| " 1935 | 8.8 " |

| Area | S w i n e s Stock in 1930 in 1000 | Imports in 1926/36 | Exports in 1000 | P o r c | | Ham and bacon | |
|-----------------|---|-----------------------|--------------------|--------------------|--------------------|--------------------|----------------------|
| | | | | Imports 1926/36 | Exports in 1000 | Imports 1926/36 | Exports in 1000 g |
| Austria | 1,965.4 | 833.8 | 1.8 | 131.7 | 0.0 | 1.2 | 0.0 |
| Poland | 6,047.2 | 12.3 | 865.0 | 0.7 | 147.2 | 30.6 | 88.9 |
| Czecho-Slovakia | 2,776.2 | 660.1 | 0.9 | 15.5 | 1.2 | 42.2 | 13.7 |
| Hungary | 2,361.6 | 0.2 | 179.8 | 1.3 | 28.2 | - | 5.6 |
| Roumania | 2,323.0 | 0.4 | 207.5 | - | 3.1 | 0.0 | 0.0 |
| Jugoslavia | 2,923.9 | 1.2 | 282.8 | 0.0 | 46.3 | 0.3 | 4.7 |
| Bulgaria | 1,002.1 | 0.0 | 3.1 | - | - | 0.0 | 0.0 |
| Combined: | 19,399.4 | 1,508.0 | 1,540.9 | 149.2 | 226.0 | 74.3 | 112.9 |
| Germany | 23,553.1 | 124.4 | 87.9 | 25.5 | 17.5 | 69.4 | 2.4 |
| Italy | 3,318.1 | 32.7 | 41.5 | 9.0 | 39.0 | 40.3 | 11.6 |
| Soviet-Union | 13,559.0 | 6.4 | 11.7 | - | 32.6 | - | 82.8 |

SERTÉS ÁLLOMÁNY

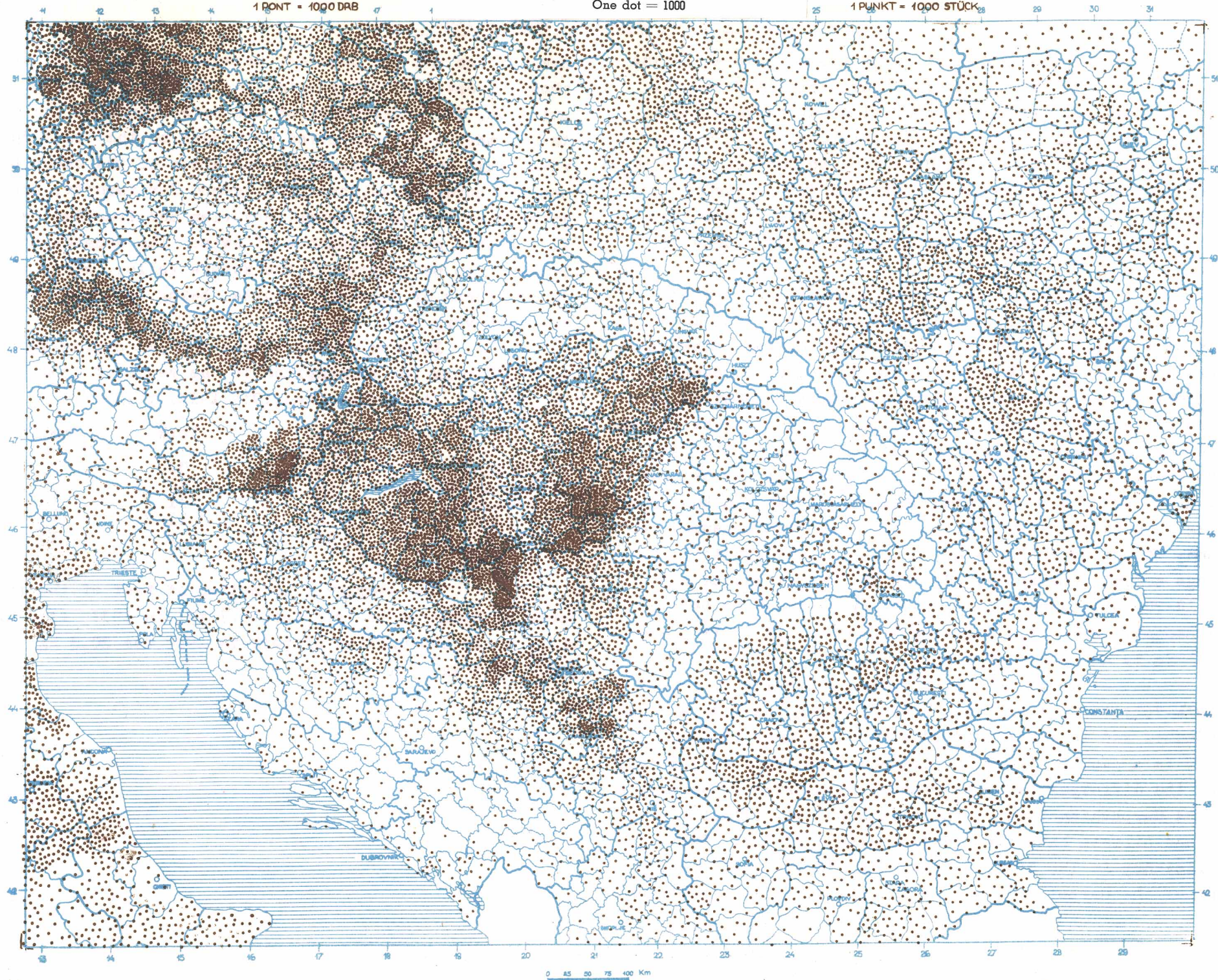
1 PONT = 1000 DBB

SWINE-STOCK (ABOUT 1935)

One dot = 1000

SCHWEINEBESTAND

1 PUNKT = 1000 STÜCK



Per Capita Amount of Pork /1935/.

From the number of swine-stock, just as in the case of cattle, the annual dressed carcass weight and the amount of meat and fats for consumption may be calculated. At the calculations the racial distribution of the swine-stock must be taken into consideration. In Hungary in 1935, 81 per cent of the swine-stock contained fat-producing swines and 19 per cent meat-producing swines. At the same time in Germany, the entire stock consisted of swines for meat.

The demand for consumption varies by regions. In general, more meat is consumed in the north than in the south, but pork is of greater importance than any other meat in the north. More pork and fats are naturally consumed in the areas, where climatic conditions render possibilities for swine-raising and maize production, than at those places, where only a few swines are raised. In comparing the data of swine-stock with those of foreign trade, it may be seen that about 1935 in Dismembered Hungary 21.9 kg, in Roumania 9.2 kg, and in Yugoslavia 8.6 kg pork had been consumed per person. Comparing the data of the other countries too, the average annual consumption of pork in Central Europe had been 10-20 kg a person. In case the swine-stock is below this amount, there is a deficiency in pork, if it is above it, there is an excess of pork.

The territories having a surplus or a want of pork vary in Central Europe. We find regions with a great abundance, and in great need of pork quite near to each other. As a result, trade in pork and in fats is very lively among the different parts of regions. Hungarian Transdanubia /in the Carpathian Basin/, the northern foot-hill of the Alps and Silesia have the greatest excess of pork. There is a deficiency in the Dinaric Highlands, in the northern portions of the Carpathians and in the regions of the Bohemian

Erz Gebirge and the Sudeten. Especially the latter areas show a great deficiency owing to the high density of population. The inhabitants of the borderlands of the Carpathians may be well supplied with pork by the Great Hungarian Plain and Transdanubia. The areas of the Czech Basin and its borderlands, having a demand for imports, are lying near to the Austrian, Bavarian and Prussian territories with a great abundance of swine. The demands of the Balkans can be covered by the Morava Valley, where there is an excess of overland exports, being the level of consumption very low.

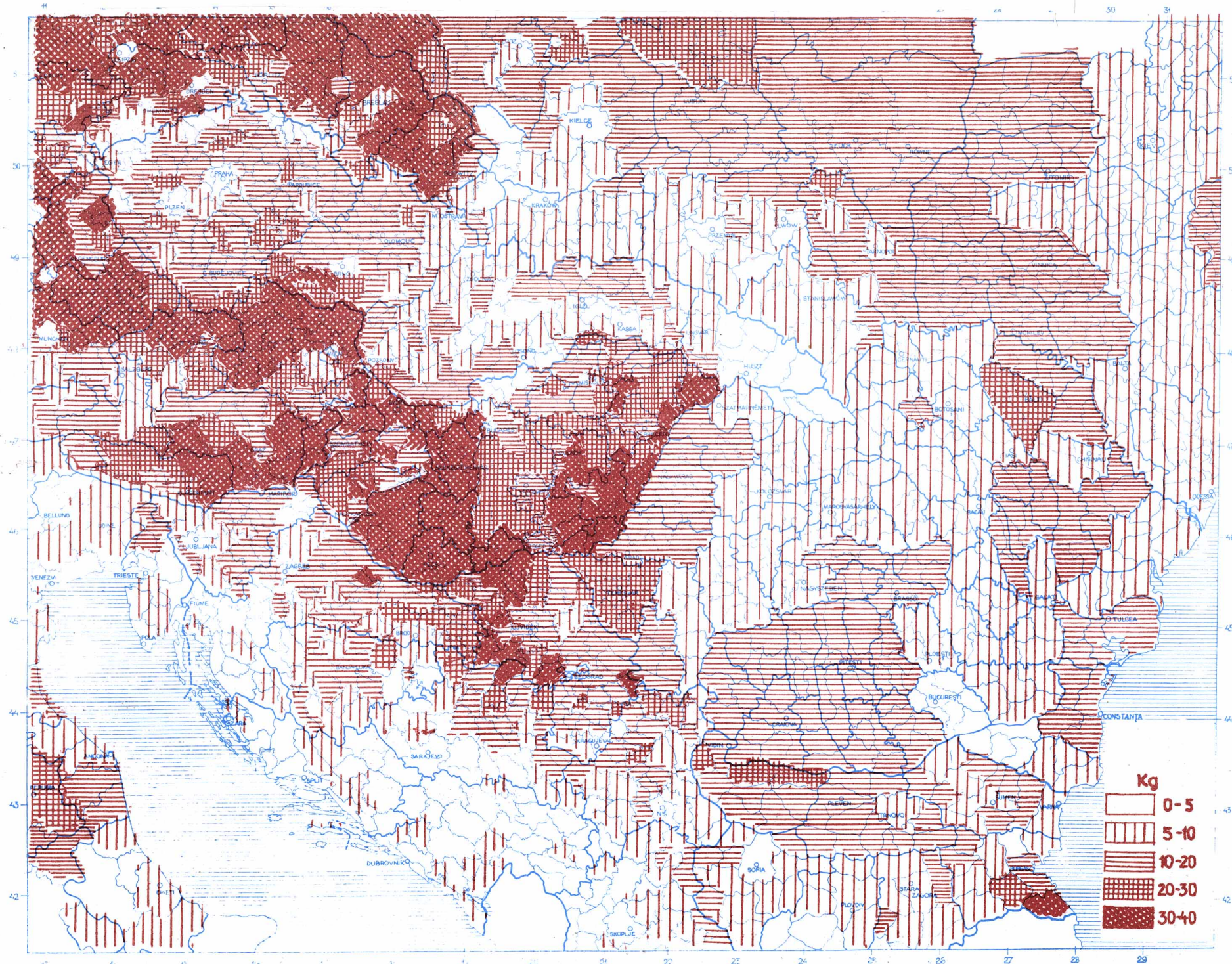
In some of the states the per capita amount of beef and pork for consumption in the years of 1930-34 was as follows: /Agrarrundschau, 1938. I-IX. p. 235./

| | Beef | Pork | Combined |
|-----------------|------|------|----------|
| Germany | 16 | 34 | 50 |
| Czecho-Slovakia | 12 | 18 | 30 |
| Roumania | 7 | 11 | 18 |
| Poland | 8 | 11 | 19 |
| Italy | 10 | 5 | 15 |

The average consumption of beef of the inhabitants of Budapest in 1936 was 15.7 kg, in 1937 13.2 kg; while their consumption of pork in 1936 was 20.8 kg, in 1937 21.3 kg.

AVAILABLE PER CAPITA AMOUNT OF PORK IN KG

KG-BAN.



Per Capita Amount of Fats /1935/.

This map shows quite a different picture from that representing the per capita amount of pork. In the Bavarian, Saxonian and Silesian territories abundant in swine, for the most part, the raising of meat-producing swines has been carried on. In spite of their large stock of swine, these areas are in lack of fats. Pigs for fat are raised in Central Europe in the Hungarian Basin. In relation to the number of population there is a very large stock of swines especially in Transdanubia and in the Great Hungarian Plain. The Hungarian Basin rich in swines for fat is continued in the areas lying at the estuary of the Sava and in the basin of the Morava, where the number of fattened pigs is also very large. The large stock of swine of the centrally located Hungarian Basin meets not only the demands of the bordering lands poor in fats, but suffices to cover the demands of the neighbouring regions too. Export is tended primarily toward the northwest, as in the south the level of consumption is lower, the population is less dense, and fat is replaced by oil. The Eastern European Plain has a less dense population still and the living standards are lower there.

In comparing the stock of swines with the foreign trade, the probable per capita consumption of fats proved to be in Dismembered Hungary 26.8 kg, in Roumania 5.7 kg, and in Yugoslavia 13.4 kg. In Austria, Germany and Czecho-Slovakia swine-fats are replaced by margarine. On account of this, the demands and the consumption for fat cannot be calculated with such an approximate accuracy as the meat consumption. Taking into consideration the data of the other countries as well, the annual average per capita consumption of fats of the Central European inhabitants

has been estimated to be 10-15 kg. Below this amount there is a deficiency, above it an excess of fats.

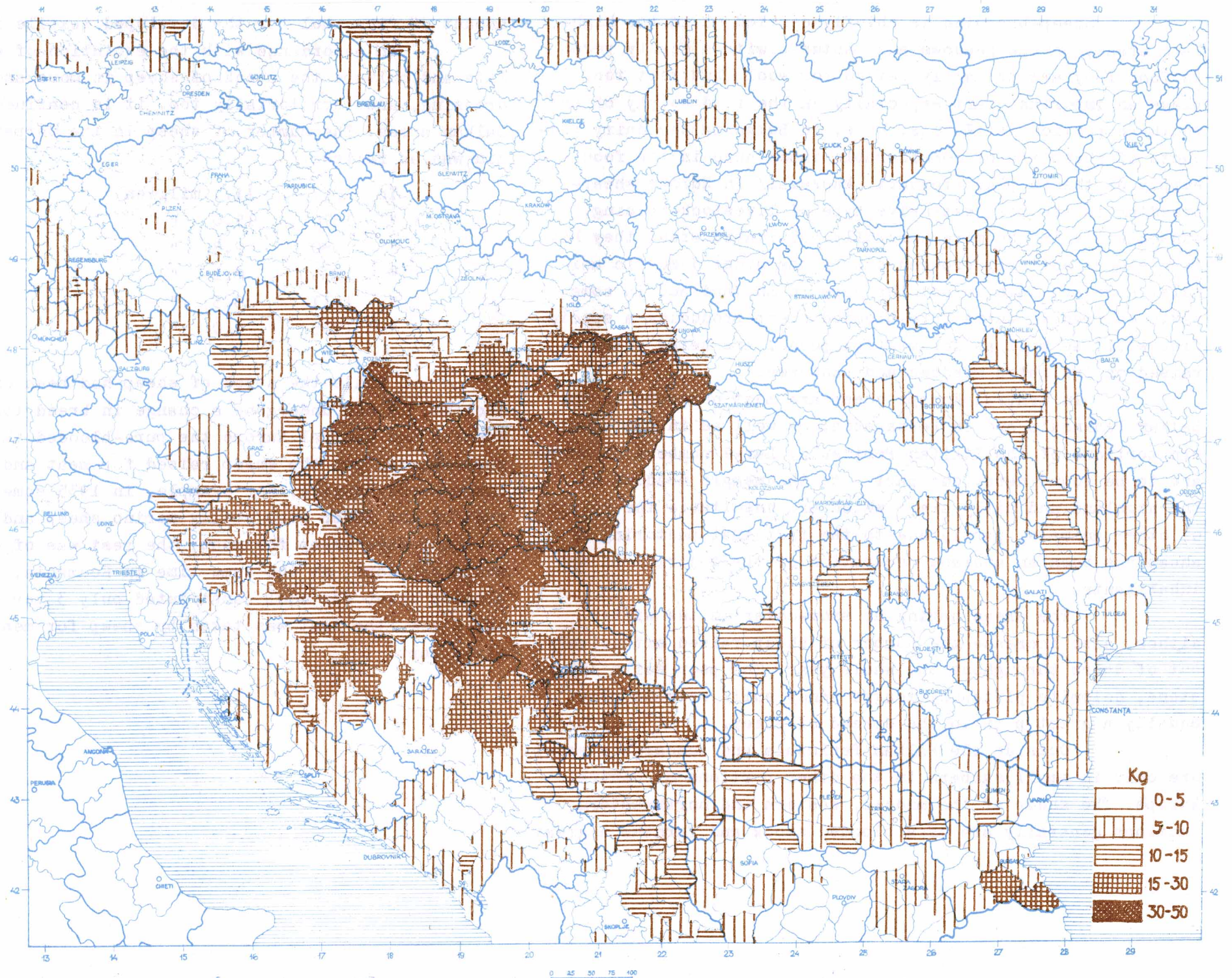
That sharp boundary which may be seen in the middle of our map in the Carpathian Basin along the cities of Szatmárnémeti-Nagyvárad-Arad, does not exist in reality. The areas of the Great Hungarian Plain ^{are} rich in swines and fats. Concerning the livestock of Roumania, we possess only data by counties which do not give a true picture about the conditions typical of the transition areas.

The states which appear in the map in their total area, are able to cover each other's demands for swine, pork and fat, as well as they are able to make use of each other's surplus. Thus the population of this area combined does not rely on imports from other remoted regions, neither have they a considerable surplus amount after having supplied the want of each other.

RENDE

AVAILABLE PER CAPITA AMOUNT OF FATS IN KG

N K É N T K g _ B A N .



The Stock of Sheep.

Sheep-breeding is chiefly carried on in the high-land areas, on the meadows and pastures with a scanty vegetation. They are primarily raised for wool, but meat too, plays an important part especially in the food supply of the southern portions of Europe. Here, in Bulgaria the dairy products of sheep are of considerable importance in the food supply of the people. /Yoghurt, kaskaval/ In Europe sheep-breeding is the most extensive type of livestock-raising, consequently in the more carefully cultivated areas they have been almost entirely crowded out by the other domestic animals. However, this is not the case in England and in some parts of France, where pure-blooded sheep producing a special fine wool, as well as for meat purposes, are being often raised on irrigated meadows and pastures.

In Central Europe sheep are most numerous on the Balkan Peninsula and in Bessarabia, as well as in the southern portions of the Italian Peninsula. Large numbers of sheep are to be found here, due partly to the meagre meadows of the highland and hilly areas which are unsuitable for raising of other animals, partly due to the fact that pasturing of sheep has been an ancient occupation of the majority of the inhabitants.

The areas having no snow-cover in the winter either, also increase the number of sheep raised extensively out of doors throughout the whole year. The poor soils /limestone, dolomite plateaus, meagre sandy soil/ seem to play equally a great part in the spread of sheep.

Outside the Balkan Peninsula and Bessarabia sheep are only in small numbers in the other portions of Central Europe. The sheep of the middle, western and northwestern sections generally are of a blooded stock and furnish a great

amount of fine wool for the developed textile industry.

In accordance with the evolution of economic life and culture the stock of sheep is more and more decreasing, and territorially too, it is confined to the Balkan areas. The number of sheep in the Carpathian Basin was as follows:

| | |
|---------|--------------|
| In 1857 | 11.3 million |
| " 1870 | 15.0 " |
| " 1880 | 9.8 " |
| " 1895 | 8.1 " |
| " 1911 | 8.5 " |
| " 1935 | 6.0 " |

While the stock of sheep had been on the decline, it has undergone a change in breed too. In Western and Central Europe the pure-blooded sheep for wool crowded out the sheep raised for meat and milk. In Dismembered Hungary, for example, in 1935 some 74 per cent of the sheep were woolly merino sheep and only 3 per cent were sheep for meat; the rest was of different and mixed sort. At the same time in Roumania, the pure-blooded sheep for wool constituted only 3 per cent of the stock, the rest was taken by sheep for meat and of mixed sort.

JUH ÁLLOMÁNY

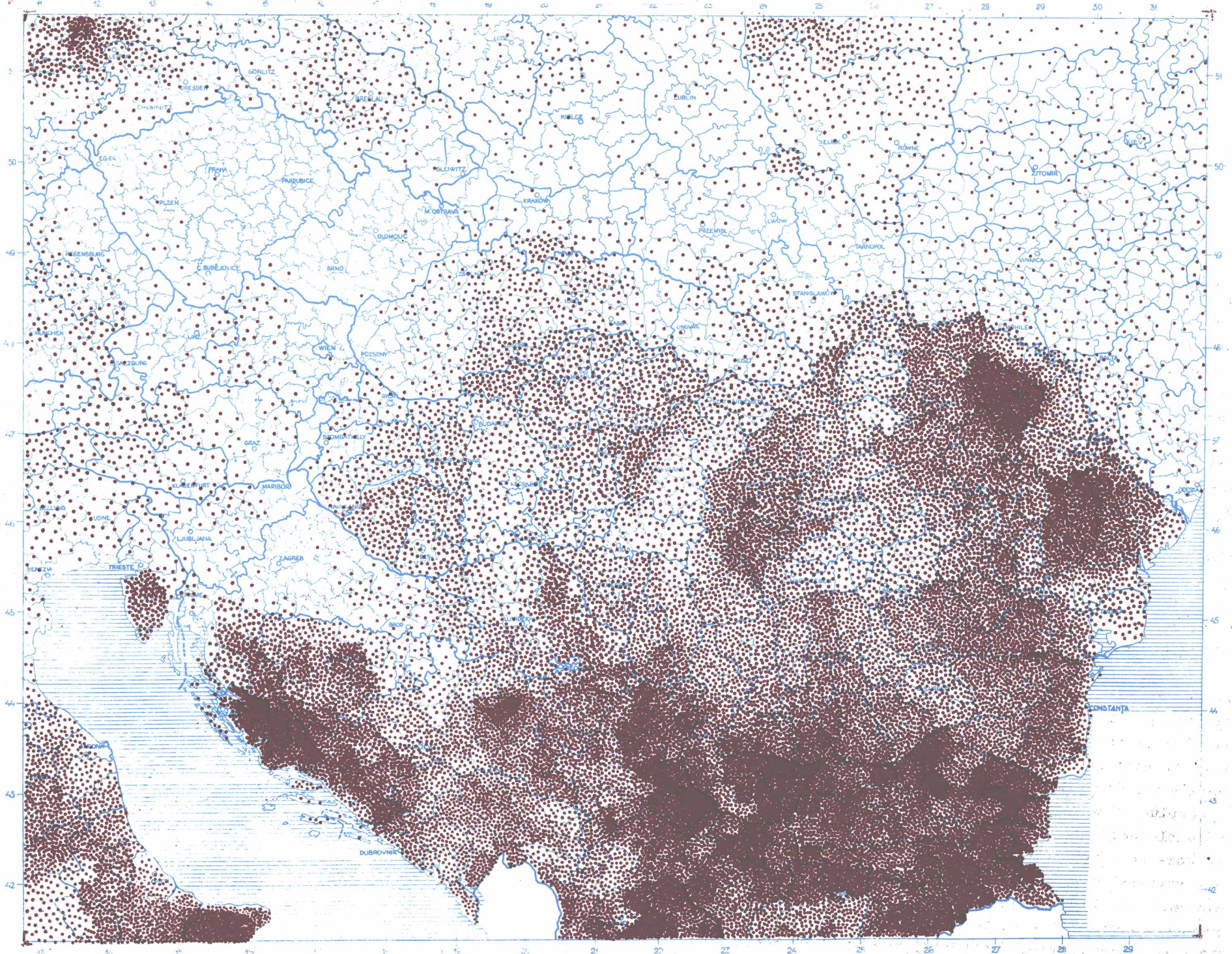
1 PONT = 1000 DB

STOCK OF SHEEP (ABOUT 1935)

One dot = 1000

SCHAFEBESTAND

1 PUNKT = 1000 STÜCK



Per Capita Amount of Mutton /1935/.

In the meat supply of Central Europe mutton plays a subsidiary part. In larger quantities it is consumed in those regions where the stock of sheep is large. In the most densely populated western and northwestern portions of Central Europe it is of no considerable importance, from the point of view of meat. It is much more important in the Balkans where the stock of cattle and swines is very scanty. Even here, sheep constitute not more than one-sixth of the beef and pork consumption. The apparent consumption of mutton in Hungary is 1.5 kg, in Roumania 3.3 kg, in Yugoslavia 3.4 kg. per head.

The map representing the available quantity of mutton per head is congruent with the one indicating the stock of sheep. The southeastern areas containing large numbers of sheep namely, are everywhere sparsely populated, consequently there are no considerable differences in the consumption.

The wool-production of the Central European states is rather different and it does not run parallel with the number of sheep. This is due to the fact that the stocks consist of various kinds of sheep, consequently the yield of wool is different. In spite of the fact that the Balkan states have a fairly large stock of sheep, their foreign trade shows a surplus of wool-imports. This is due to the small and less valuable amount of wool of their stock. Hungary alone exported more wool than she imported around the years of 1930. Here the overwhelming majority of the stock is made up by sheep for wool. However, Hungary's exports had continually diminished and in 1935 she had a surplus of wool imports./Imported 12.4 thousand quintals, exported 4.1 thousand q/.

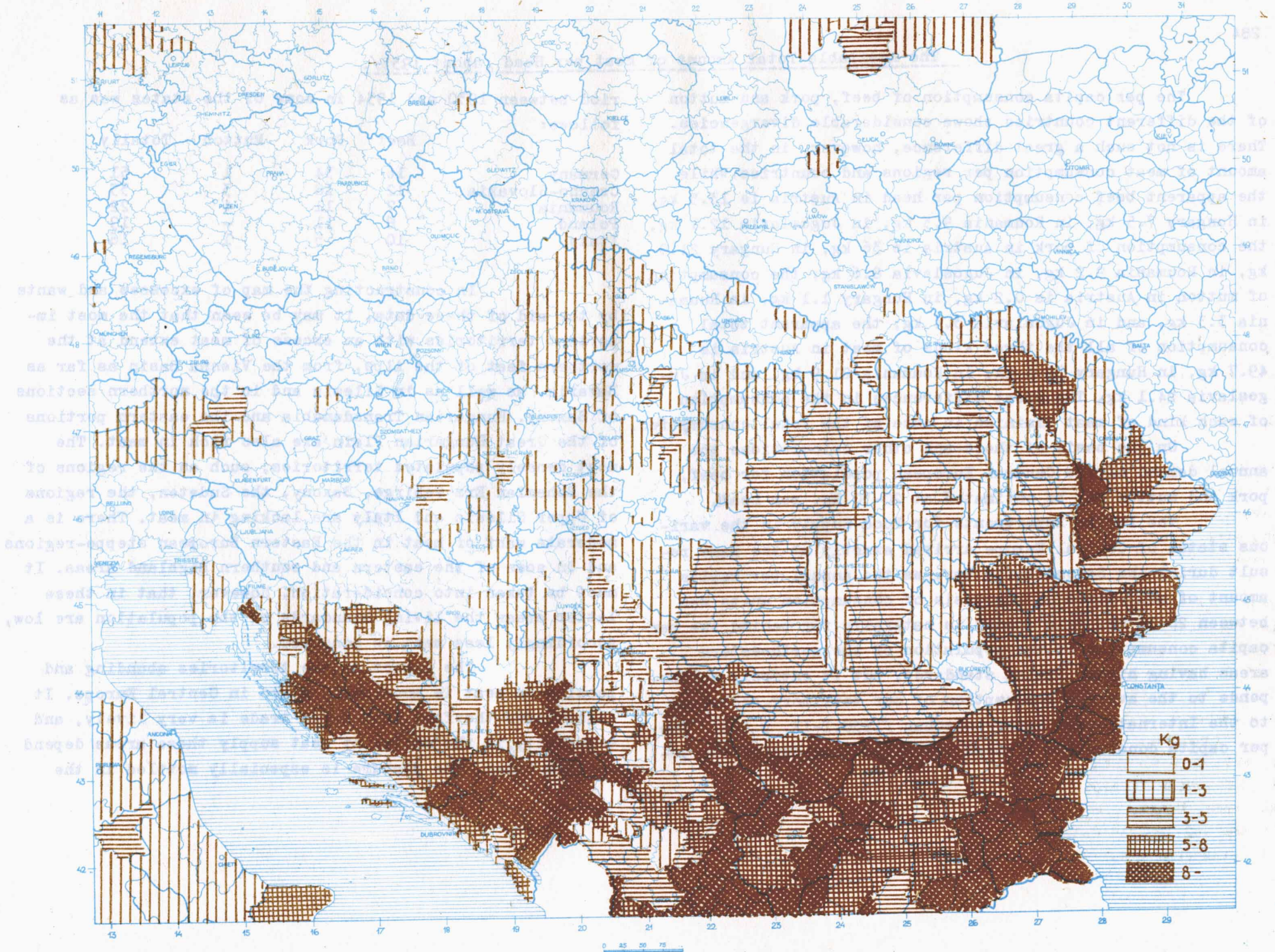
This change was due to the rapid development of the Hungarian textile industry.

| Area | S h e e p M u t t o n | | | W o o l | | Wool production in 1930 in 1000 q |
|-----------------|--------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|---|
| | Stock in 1930 in 1000 | Imports in 1926/30 1000 q | Exports in 1926/30 1000 q | Imports in 1926/30 1000 q | Exports in 1926/30 1000 q | |
| Austria | 272.2 | - | - | 76.1 | 3.2 | 5 |
| Poland | 2.492.1 | 0.0 | 1.3 | 144.9 | 4.6 | 44 |
| Czecho-Slovakia | 607.6 | - | - | 168.0 | 14.1 | 10 |
| Hungary | 1.463.8 | - | 2.3 | 7.8 | 47.7 | 59 |
| Roumania | 11.920.5 | - | - | 21.3 | 6.4 | 238 |
| Jugoslavia | 7.953.1 | - | 0.7 | 28.0 | 0.6 | 123 |
| Bulgaria | 8.739.8 | 0.0 | 0.1 | 11.4 | 0.0 | 89 |
| Combined: | 33.449.1 | 0.0 | 4.4 | 447.5 | 102.0 | 568 |
| Germany | 3.508.2 | 42.6 | 3.2 | 1.668.9 | 102.0 | 147 |
| Italy | 10.268.1 | - | - | 488.3 | 31.7 | 218 |
| Soviet-Union | 108.758.3 | - | - | 319.0 | 7.4 | 889 |

REN

AVAILABLE PER CAPITA AMOUNT OF MUTTON IN KG

- B A N .



The Available Total Amount of Meat per Head /about 1935/.

The per capita consumption of beef, pork and mutton of the different countries shows considerable divergencies. There is not such a great difference, however, in the total amount of meat consumption per regions and countries. While the apparent beef consumption per head in Austria is 13.5 kg, in Hungary 7.5 kg, in Roumania 9.5 kg, in Yugoslavia 12.1 kg, the consumption of pork in Austria is 36 kg, in Hungary 21.9 kg, in Roumania 9.2 kg, in Yugoslavia 8.6 kg; the consumption of mutton in Austria is 0.2 kg, in Hungary 1.1 kg, in Roumania 3.3 kg, and in Yugoslavia 3.4 kg; the apparant total consumption of all the three kinds of meat in Austria is 49.7 kg, in Hungary 30.4 kg, in Roumania 21.9 kg, and in Yugoslavia 24.1 kg. The great differences in the consumption of each kind of meat diminish in case of the total consumption.

On the basis of these and other calculations the annual demand of the Central European population for beef, pork and mutton may be estimated at 20-30 kg. per head.

The Public Departments for Food Supply in the various states of Central Europe arrived exactly at the same result during the Second World War, as the annual per capita amount of meat fixed on the basis of consumption units was between 20-30 kg. This amount is naturally far behind the per capita consumption of the population of the northwestern areas having higher living standards, but it entirely corresponds to the average consumption of our territory. According to the Internationale Agrarrundschau /1938.I-IX. p.285./ the per capita consumption of meat per kilogramme during the pe-

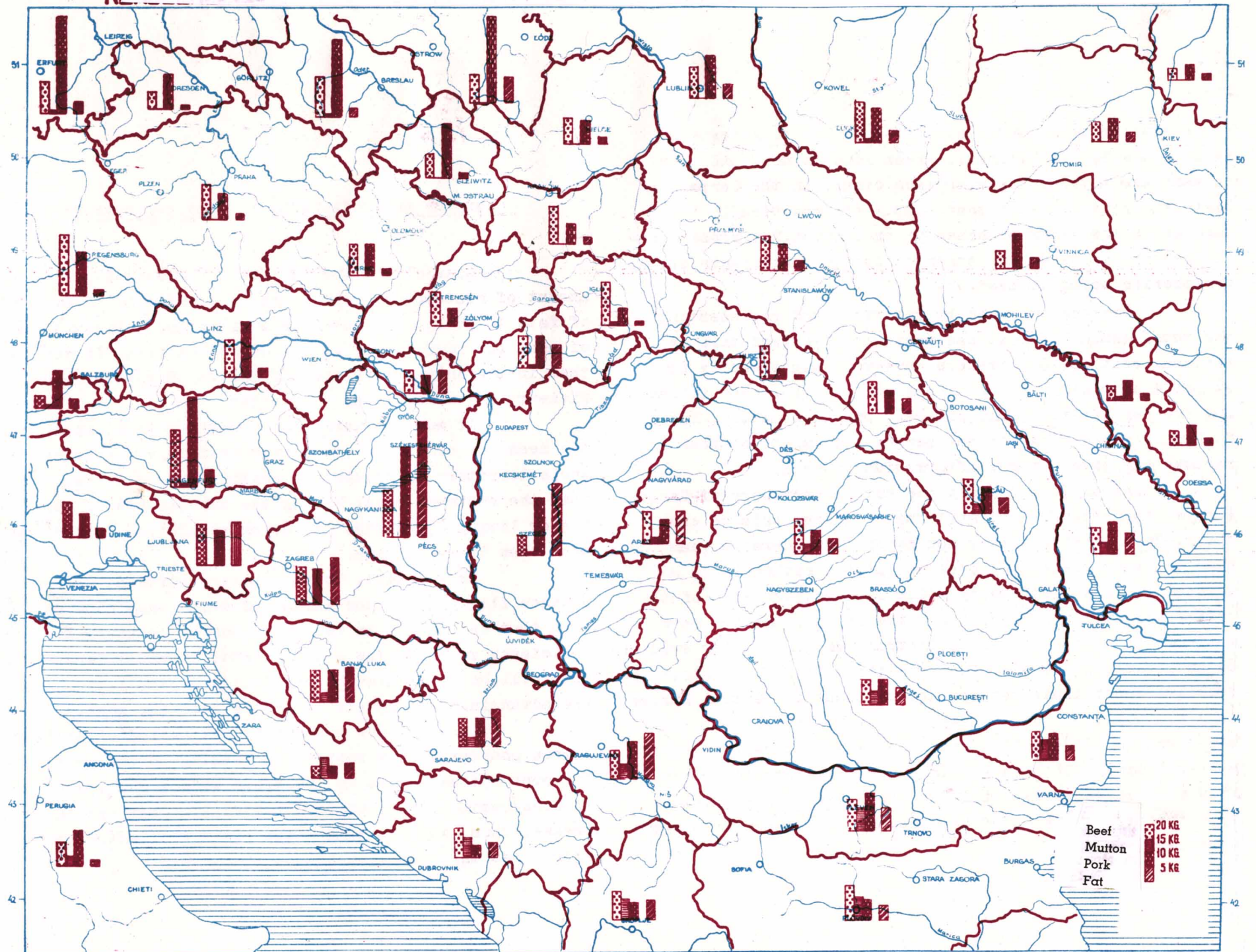
riod between 1930 and 1934 in some of the states was as follows:

| | Beef | Pork | Mutton | Totally |
|-----------------|------|------|--------|---------|
| Germany | 16 | 34 | 1 | 51 |
| Czecho-Slovakia | 12 | 18 | 3 | 33 |
| Roumania | 7 | 11 | 4 | 22 |
| Poland | 8 | 11 | - | 19 |
| Italy | 10 | 5 | 1 | 16 |

In constructing the map of excesses and wants by the aid of these data, it may be seen that the most important territories with an excess of meat extend at the northern feet of the Alps, from the Vienna Basin as far as Bavaria, as well as in Silesia and in the northern sections of Saxony. Hungarian Transdanubia and the eastern portions of the Great Hungarian Plain are also rich in meat. The most densely populated territories, such as the regions of the Bohemian Erz Gebirge, Saxony, the Sudeten, the regions of Upper Silesia and Italy are lacking in meat. There is a moderate want of meat in the Eastern European steppe-regions and in some of the eastern and southern highland areas. It must be taken into consideration, however, that in these latter areas the living standards of the population are low, accordingly less meat is consumed.

The aspect of the territories abounding and lacking in meat is mosaically mixed in Central Europe. It illustrates the fact that inner trade is very lively, and especially in the matter of meat supply these areas depend on each other. The picture is especially mottled in the

AVAILABLE PER CAPITA AMOUNT OF MEAT AND FAT BY REGIONS IN KG



Bohemian-Moravian Basins and in the surrounding regions. Even on the Balkan Peninsula areas rich in meat and those in want are alternating with each other. In the Carpathian Basin the conditions of meat supply are practically the same as in the other branches of production. The areas showing central excesses are balanced by the inhabitants of the peripheries being in need.

/The map coloured by districts and representing the total amount of meat has been omitted from this provisional edition. Our readers, however, might easily construct a combined picture on the basis of the maps illustrating the per capita amount of beef, pork and mutton. The following map indicating the per capita amount of meat per regions may give a vague information as well./

Taking into account the entire territory of Central Europe, the excesses and wants more or less balance each other. This territory does not export considerable quantities to other areas, and does not import either large amounts. The great diversity which is characteristic of the relief and climatic conditions, the density and the occupations of the population of Central Europe, is also evidenced in livestock-raising. There is the same close contact and coercive inner trade between the portions of Central Europe from the point of view of meat supply, as from that of the bread-grains. Just as the entire area of Central Europe is self-supporting in bread-grain and neuter from the point of view of foreign trade, it is on the whole self-supplying from the point of view of meat supply and neuter from that of foreign trade.

Surplus and Deficiency in Meat per Regions.

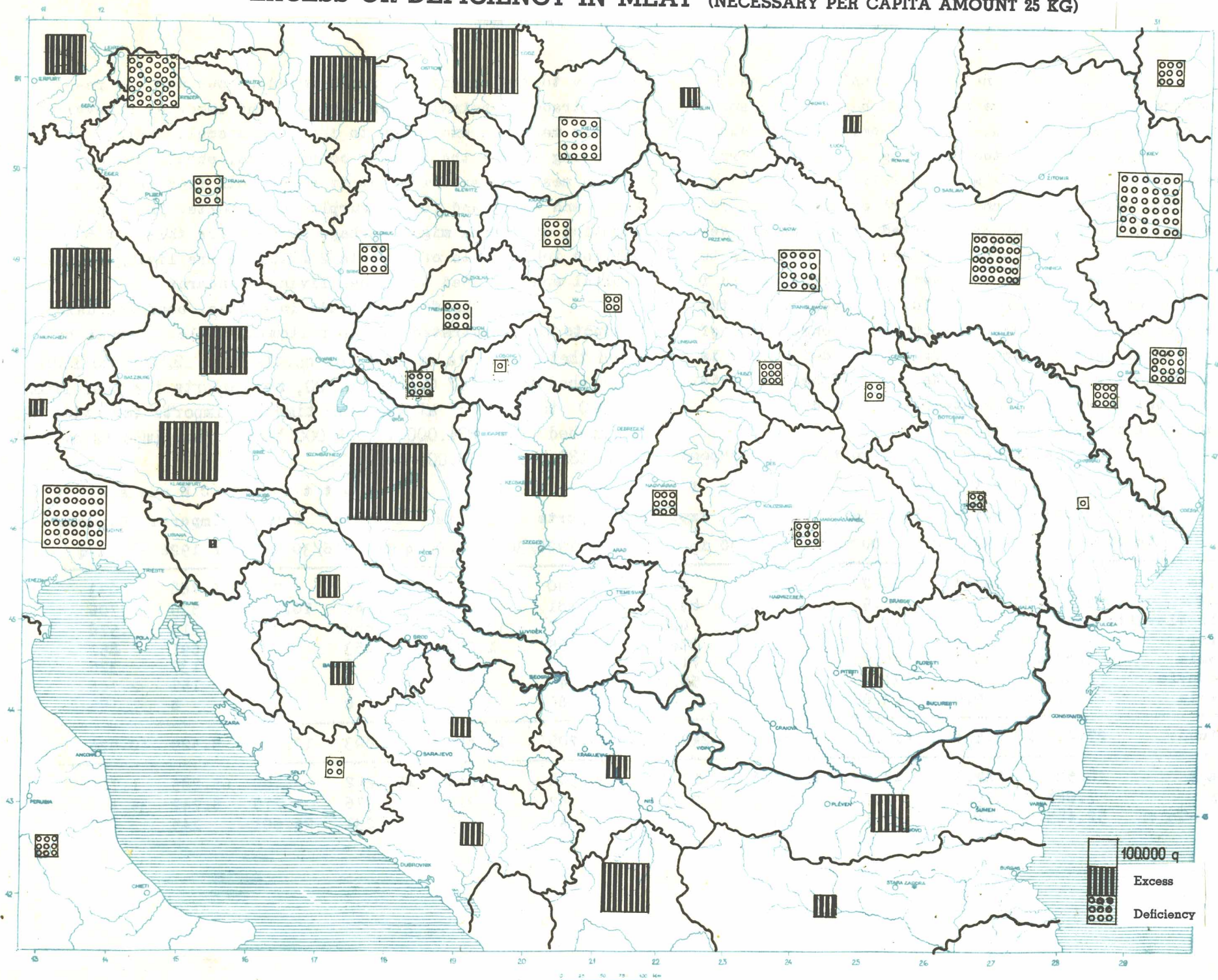
Considering the fact that the annual per capita amount of meat-consumption is on an average 20-30 kg, and that of fats 10-15 kg, the absolute surplus and deficient amount of meat per regions may be calculated as well. It may be seen that in the entire territory of Central Europe excess and deficiency are absorbed by each other.

It must be taken into consideration, however, that the needs of consumption had been uniformly determined for the whole territory, although the northern areas consume more meat than the southern ones, having the inhabitants of the former higher living standards. The urban population consumes more meat than the rural one.

As a result, in the eastern portions of our map the squares illustrating the amount of deficiency show somewhat more than deficiency in reality, whereas in the western sections deficiency is below the actual needs. These differences gradually will be eliminated by the fact that the living standards are advancing to a levelling in the east and west.

In war-times and during the period of economic crises consumption is rapidly decreasing in the areas with a big consumption, while in the areas with a small consumption - in consequence of the uniform ratios - it may eventually increase. Thus, in such times, the picture of actual consumption approaches that one illustrated by our map.

EXCESS OR DEFICIENCY IN MEAT (NECESSARY PER CAPITA AMOUNT 25 KG)



The Available Amount of Meat, Surplus and
Deficiency per Regions.

Styria, Craine and Macedonia are rich livestock-raising areas where more than half of the amount of meat may be exported from, as it is beyond their own needs. Similarly rich livestock-raising and meat-exporting areas are Lower Silesia, the western Polish borderland and Bavaria, from where more than one-third or one-fourth of the slaughtered animals may be exported. The greatest deficiency, compared to the available amount of meat, is to be found in the Ukraine, in the environment of Kiev and in the province of Kielce in Poland. In the former place the available amount for consumption covers but one-fourth of the theoretical demands. Greater or similar deficiency is to be found in the smaller areas as well /Ruthenia, Soviet-Moldavia/, but these striking examples might disappear when investigating the larger areas.

The public data of foreign trade correspond

closely to the conditions represented by our map, as regards trade in animals, meat exports and imports. However, Austria makes an exception to this. This small state, according to the theoretical consumption, should possess enough meat for exports, yet it shows both from cattle and beef, and swine and pork a surplus of imports. The consumption of Vienna might perhaps account for this. Of 6 million inhabitants of Austria 2 millions are living in the capital and are used to higher living standards.

The foreign trade in cattle, beef and dairy products is illustrated by our following Table. It must be noted that Austria's exports for cattle from 1926/30 to 1935 diminished from 147 000 to 25.000, her imports for beef from 220.000 to 32.000; at the same time her imports for swine also diminished from 834.000 to 499.000 heads, her imports of pork from 132.000 to 36.000 quintals.

| | C a t t l e | | | B e e f | | M i l k | | B u t t e r | | C h e e s e | |
|-----------------|---------------|------------|-----------|------------|-----------|------------|-----------|-------------|---------|-------------|---------|
| | Stock in 1930 | Imports | Exports | Imports | Exports | Imports | Exports | Imports | Exports | Imports | Exports |
| | in 1000 q | in 1926/30 | in 1000 q | in 1926/30 | in 1000 q | in 1926/30 | in 1000 q | in 1926/30 | in q | in 1926/30 | in q |
| Austria | 2.312.8 | 147.1 | 30.2 | 219.7 | 6.6 | 9.790 | 2.773 | 1.115 | 766 | 2.788 | 1.033 |
| Poland | 9.399.5 | 0.3 | 26.9 | 0.0 | 89.4 | 181 | 960 | 46 | 10.199 | 529 | 1.706 |
| Czecho-Slovakia | 4.457.2 | 66.3 | 11.7 | 26.7 | 6.2 | 1.017 | 13.519 | 488 | 309 | 1.219 | 3.578 |
| Hungary | 1.777.9 | 1.4 | 96.3 | 0.1 | 17.9 | 2.085 | 1.092 | 153 | 499 | 691 | 852 |
| Roumania | 3.834.1 | 0.1 | 89.9 | 0.0 | 71.3 | 25 | 0 | 0 | 85 | 137 | 326 |
| Jugoslavia | 3.812.2 | 0.2 | 131.5 | 0.0 | 58.2 | 49 | 519 | 1 | 260 | 157 | 2.146 |
| Bulgaria | 1.817.4 | 0.0 | 23.6 | - | - | 62 | 1 | 0 | 45 | 8 | 1.185 |
| Combined: | 27.411.1 | 215.4 | 410.1 | 246.5 | 249.6 | 13.209 | 18.864 | 1.803 | 12.163 | 5.529 | 10.826 |
| Germany | 18.532.6 | 282.5 | 13.0 | 1.105.6 | 23.4 | 30.508 | 1.884 | 120.262 | 150 | 65.285 | 1.767 |
| Italy | 7.088.8 | 174.4 | 2.7 | 605.4 | 27.9 | 862 | 4.324 | 976 | 1.275 | 5.242 | 34.196 |
| Soviet-Union | 52.485.8 | 68.2 | 17.1 | 4.1 | 6.3 | 141 | 0 | 231 | 25.601 | 145 | 692 |

AVAILABLE AMOUNT OF MEAT BY REGIONS COMPARED TO EXCESS AND DEFICIENCY

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