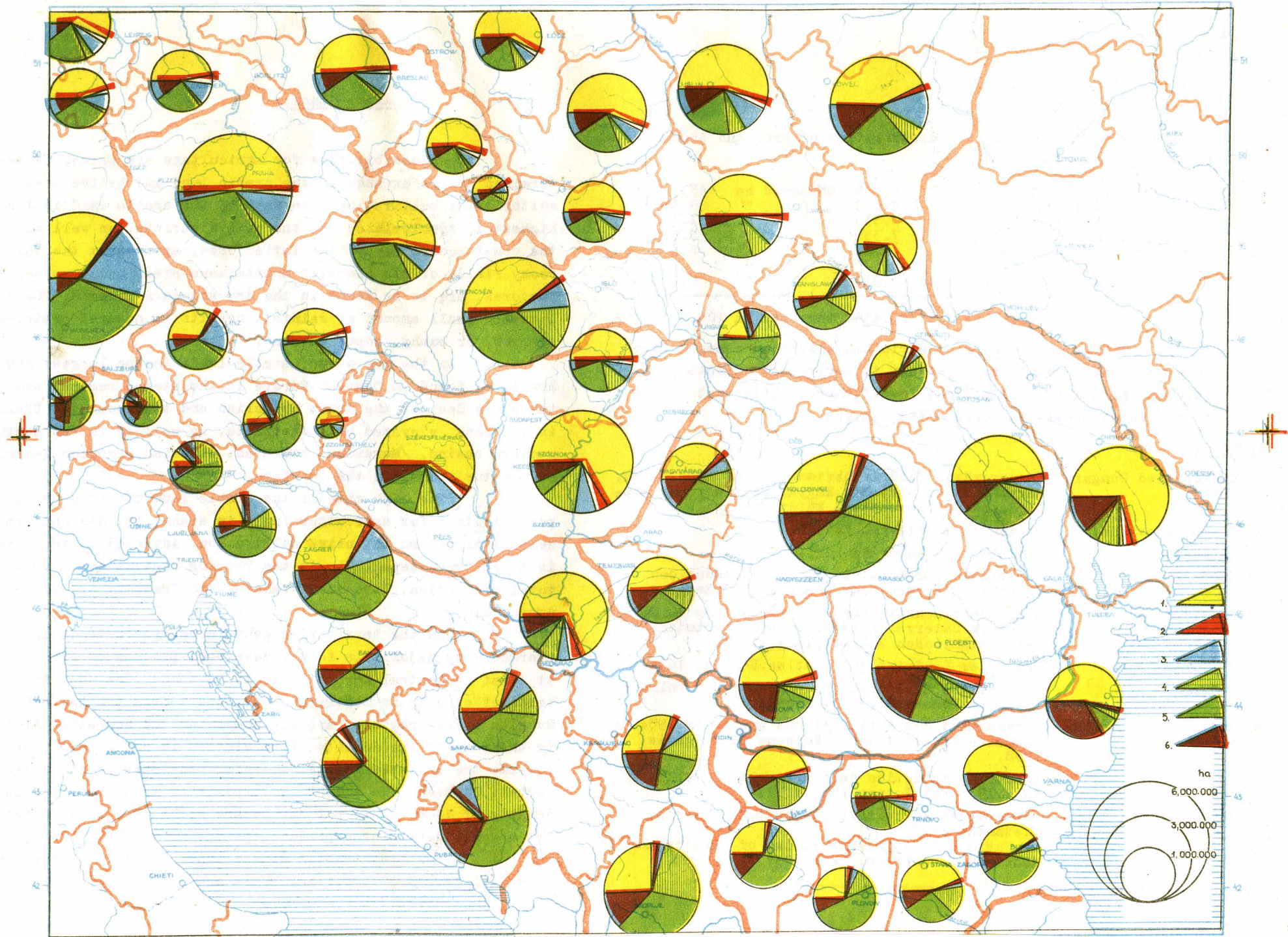


DISTRIBUTION OF AREA BY BRANCHES OF CULTIVATION



1. Arable land
2. Gardens and vine yards
3. Meadows
4. Pastures
5. Forest areas
6. Other land

natural Carpathian Basin, the distribution of area and production was as follows:

Arable land	12,936	thousand ha	45.5 %
Meadows	2,639	" "	9.3 %
Pastures	3,338	" "	11.7 %
Forests	7,332	" "	25.8 %
Gardens, vineyards, orchards	666	" "	2.5 %
Others and uncultivated	1,510	" "	5.2 %
Totally:	28,456	thousand ha	100.0 %

Similar to Hungary, Austria has also been changed into an economically monotonous area, but in a reversed direction. The rate of the arable land was the lowest there, while that of the uncultivated areas and forests the highest.

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Arable Land.

The possibilities for agriculture are primarily determined by the expanse of the arable land and by the areas unsuitable for cultivation. The rate of the arable land is the highest in the lowlands and the hill districts, as well as in the non-forested areas. The latter ones, apart from the barren rocky fields of the elevated mountainous areas and treeless pastures, are to be found in the dry and warm regions. The relatively small amount of rainfall results in natural prairies, steppes, or bushy, copsy savanas.

As the map shows, arable lands in the largest number are to be found in Central Europe in the steppe regions around the Black Sea, in the Great Hungarian and the Roumanian Plains, in the less elevated hill districts, as well as in the north-western basins, /Moravian, Bohemian, Silesian, Saxonian Basins/ and in the south, in the Po Plain.

The high rate of the arable land provides great possibilities for agriculture only in space, it does not lead necessarily to an intensive cultivation. Advanced agriculture is to be found especially in the varying regions where agricultural production, live-stock-raising and forestry are closely connected.

In the territories containing arable lands in an overwhelming majority a fairly developed produce of cereals -- at least in Central Europe -- is to be found. The most important belts of cereals in Central Europe, apart from the Eastern Russian steppe regions, are the Hungarian and Roumanian Plains. In these areas the density of population is not so high, as to consume the produced grains, therefore one part of it is exported. However, the amount for exports of today, by a population density of 70-80 souls per one square kilometre, constitutes but a small part of the production.

The distribution of the arable land in Central Europe is fairly diversified. There are larger spots but in th

Alps and in the Dinaric Mountains, where in far distances hardly any arable land is to be found. In other places, especially in the northern portion of our territory, areas rich and poor in arable land are alternating with each other. Thus inner trade is carried on between short distances. In the eastern sections, beside the widely spread arable lands of the natural steppe regions, the Pripjet Moors contain areas poor in arable lands. To the north of this region, in the Eastern European Russian table land forest areas and smaller or larger cleared areas take place alternately near one another. Their interdependence has a north-south direction, and the exchange trade is carried on in long distances.

In the Carpathian Basin there is a special distribution between the areas rich and poor in arable land. The middle portions of the Basin are abundant in arable land, while the peripheries are lacking them entirely. Between them there are transition areas. However, the areas in lack of arable land and grain-production are adherent to those abundant in them. As the river- and route-system of the peripheries radiate towards the central portions of the Basin, trade is carried on in short distances and by natural routes.

The eastern bulwark of the Carpathian Basin, Transylvania containing large mountainous areas in great number, has alone an unfavourable position in this respect. It has to encounter many difficulties concerning food-supply, as in lack of arable land cereals have to be brought to this region from rather long distances.

There is a close, lively economic trade between the mountainous districts of the Roumanian Plain and the plateau of Wallachia. In the Bulgarian territory too, varying areas rich and poor in arable land take place alternating with one another.

The productivity of the arable land is different. It depends on the climate and soil conditions, as well as on the cultivation of the soil. In the western areas the larger

amount of rainfall and the more equal distribution of humidity and temperature are favourable to a secured and well-balanced production. However, the great density of population, the favourable sale-conditions, as well as the higher standards of culture make the cultivation of the land much more intensive. The soils themselves in their natural conditions are perhaps less productive in Western Europe than in the drier and warmer regions of Southern Europe, but they are more suitable to replace the nutritive matters used up by an intensive cultivation with artificial ones.

In the Great Hungarian Plain, the Roumanian Plain and in the eastern steppe regions a dry climate, extremes in temperature, and great fluctuations in the distribution of rainfall are to be found. Cereals like dry climate and hot summers, but they also require a certain minimum of rainfall in the course of their development. The yields of production chiefly depend on precipitation occurring irregularly and not always at the right time.

In the Great Hungarian Plain, as well as in the eastern portions there are fertile brown and black steppe soils to be found. These soils, however, proved to be of various fertility even there, where there were no great differences either in relief or in climate. The best productive soils are to be found at the junction of the Tisza and Maros Rivers, and to the south of this region /Bánát, Bácska/. They are alluvial soils containing rich humus.

In the Hungarian Basin there are loess and sandy soils at many places. The loess soils are very fertile, the sandy soils are regarded as unproductive. In recent times the farmers well adapted themselves to the sandy soils as well. Of the cereals they grow rye, and of the bread-grain substituting crops they raise potatoes in the sandy soils of the Carpathian Basin. Beside this, large area of blown sand is devoted to grapes and fruits. The rentability of the poor sandy soils

planted with grapes and fruit-trees usually exceeds that of the loess soils and flood areas containing rich humus and used as grain-fields.

In general, the arable lands are increasing in Central Europe. Their areas are increased at the expense of natural pastures and unproductive regions /blown sand, marshes/. In case of the forests this creates in places an unfavourable situation. However, the marshes and flood-areas cannot be turned to a large extent into arable land in the future, as a big portion of them had been drained off, the rivers had been regulated, and the most expansive flood areas had been restricted already in the second half of the past century. Especially a mighty work of regulating the waterways and flood areas had been carried out in the Carpathian Basin, in Hungary in the second half of the XIX. century. In the Great Hungarian Plain, only by regulating the Tisza, more than 2 1/2 million hectares of area have been joined, for the most part, to the arable land at the expense of natural pastures.

Natural meadows and pastures are to be found in the elevated mountainous areas. Here the cultivation of land is hampered by the steep slopes and eventually, by the climatic conditions. /Cool weather, large amount of rainfall/ In the plateaus and hill districts the marshy, as well as the flood areas add to the rate of the meadows and pastures.

In Central Europe the Alps, the Dinaric Mountains, the Carpathians and the Balkan Mountains provide the most abundant regions in meadows and pastures, being at the same time important livestock-raising areas. The rate of meadows and pastures, however, is not high even in these regions. As the explanation of marks in our two maps shows, even the highest category approaches at one-fourth of the entire territory.

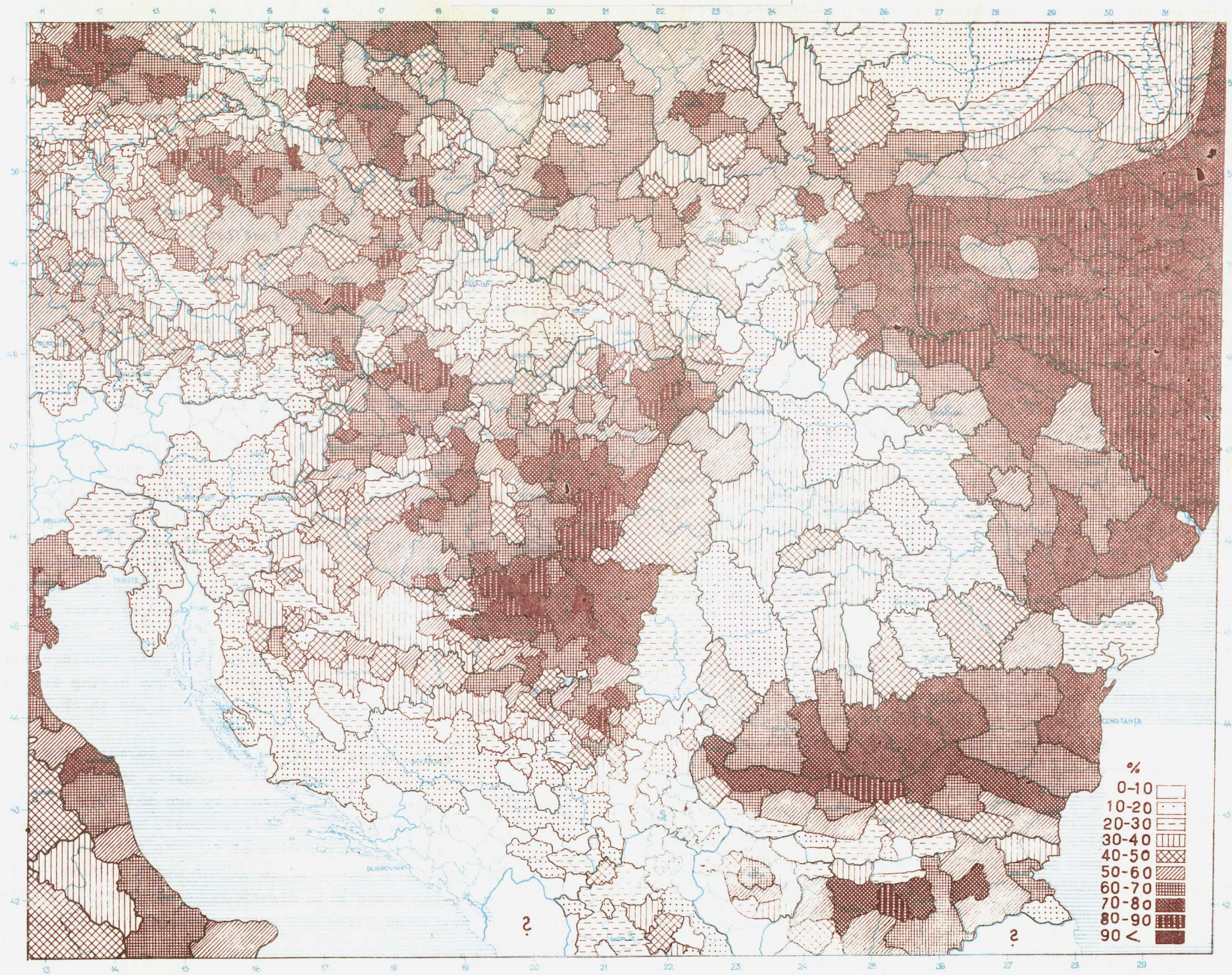
In the regions well suited for meadows and pastures by nature /high mountains, marshy areas/ meadows are to be found in the more advanced agricultural sections, while pastures in the more backward ones. The dark spots of the two maps complete each other. The highest middle section of the Alps is a notable exception to this. Here, relief renders conditions only for grazing. Thus the meadows are to be found on the northern and southern slopes leaving room for pastures. The Balkans are abundant in pastures and are deficient in meadows; almost the same situation is to be found in the Carpathians, somewhat in a moderate form though. The damp area of Eastern Poland is abundant in meadows and pastures as well.

The values of the meadows and pastures represented by our map are different. Their productivity and rentability depend primarily upon the conditions of precipitation. The highland areas of the western regions receive a large amount of rainfall, accordingly their meadows and pastures are rich. They may be mowed several times, and except the winter snowy months, they are permanently to be grazed by big animals as well.

The meadows and pastures of the Mediterranean area receive a small amount of rainfall throughout the summer, as a consequence, the grass is scanty and often parched. They have but little snow-cover during the wet winter months, consequently the grazing season shifts to the winter months. Because of the scanty grass and the great aridity these pastures are not suitable for big animals, they are much better adapted for sheep-raising.

ARABLE LAND

In the percentage of total area



The meadow and pasture areas of the middle and eastern portions having a continental climate are also poorer than those of the western mountainous districts. Here too, the pastures get parched in the summer, and the meadows may be mowed at most twice. Beside the summer aridity the winter snow-cover is also a great hindrance to grazing, the grazing-season thus is often restricted to spring. /The acid salt pastures of the Great Hungarian Plain./

The productivity and rentability of the meadows and pastures may be also estimated on the basis of statistics relating to the agricultural production of the Central European states. As a result, the yield of meadows and pastures respectively, per hectare is the largest in the Alpine provinces. The highland areas surrounding the Bohemian Basin and the regions of the Northern Carpathians rank second, but with half of this productivity and yield. The yield is also large in Silesia, in the Pripjet regions and in the southwestern elevated basins of the Southern Carpathians and of Bosnia. However, the yield of the meadows and pastures of the Eastern Carpathians is small, and it is quite slight in the eastern and southern sections of the Balkan Peninsula.

The greatest danger for the meadows lies in the great aridity. As a result, in the dry compartments of Saxony, in the middle of the Bohemian Basin and in the Moravian Basin the yield is as low, as in the Great Hungarian Plain, in the area lying beyond the Tisza, in Wallachia or Bessarabia. The yield of meadows and pastures of these latter areas are exceeded 25 or 30 times by that of the Alpine regions.

The natural meadow and pasture areas resulted in a nomadic pastoral way of living on the Balkan Peninsula and in the other continental regions. The shepherds wander with their flocks and herds from before the winter snow and summer drought to snowless or more humid regions. The most typical nomadic pastoral people were the Roumanians who in the course of their history had wandered from the regions of Albania along the grassy pastures of the Balkans up to the feet of the Southern Carpathians. From here they moved partly to those areas of Transylvania abundant in natural pastures, and partly to the outer feet of the Eastern Carpathians. They scattered in smaller groups on these natural pasture areas and in the other parts of the Balkan Peninsula as far as Istria as well.

Forest Areas.

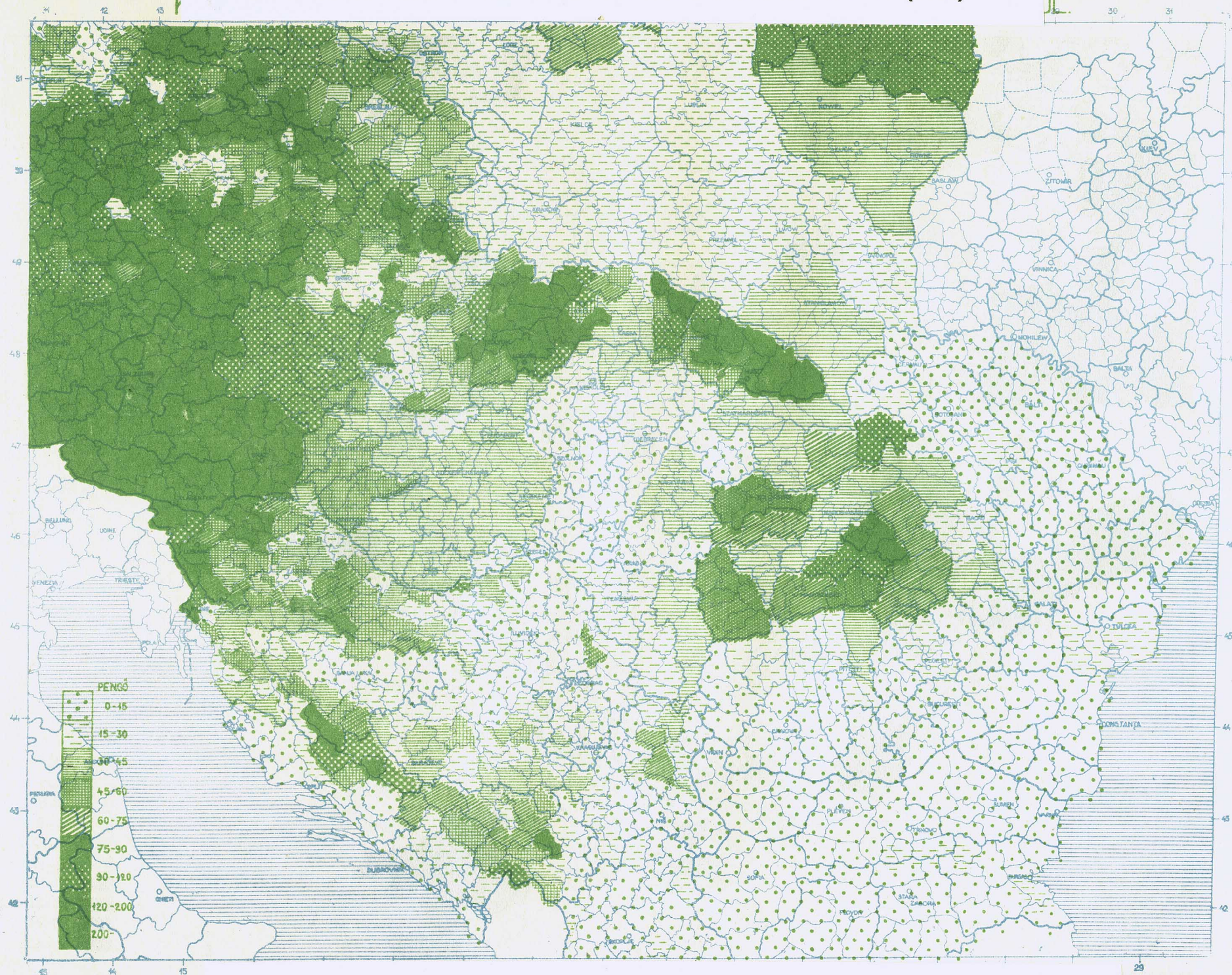
The major part of the Central European territory consists of natural forest areas. Without man's interfering the conditions of temperature and precipitation would bring forth closed forest growth everywhere, except the steppe belt of the Great Hungarian Plain and the Black Sea. However, man has cleared much land which were originally forested. Forests occur wherever the land with the methods of cultivation cannot be utilised. Forests are left in safety in the highland areas where relief renders conditions unsuitable for agriculture. Here the forest growth of the northern slopes was left uncleared to a larger extent than that of the southern slopes where clearing has penetrated further up. There are forests to be found in the marshy areas too.

The forests of the Central European territory show different types. From economic point of view distinctions should be made between coniferous, beech, oak and mixed deciduous, as well as Mediterranean forests. Conifers occur in the elevated highland areas, especially in the Alps and in the Carpathians. Beech make up the major part of the forests of the less elevated areas, while the principal species of trees of the plateaus and marshy regions are the oak and other leafy trees.

In the areas with a boreal climate conifers and birch are mixed. In the Mediterranean regions having dry, arid summers and mild, wet winters, thin forests and thickets are to be found.

Not only in species differ the forests from each other in Central Europe, but also in density and their being closed. The areas marked as forests by the military topographic maps are just as deceiving in this respect, as the maps made on the basis of statistical data of forests by districts or provinces. The thin forest areas of the Karst regions or the Balkan Mountains mixed with clearings, or covered sometimes only with scattered trees and bushes, can by no means be com-

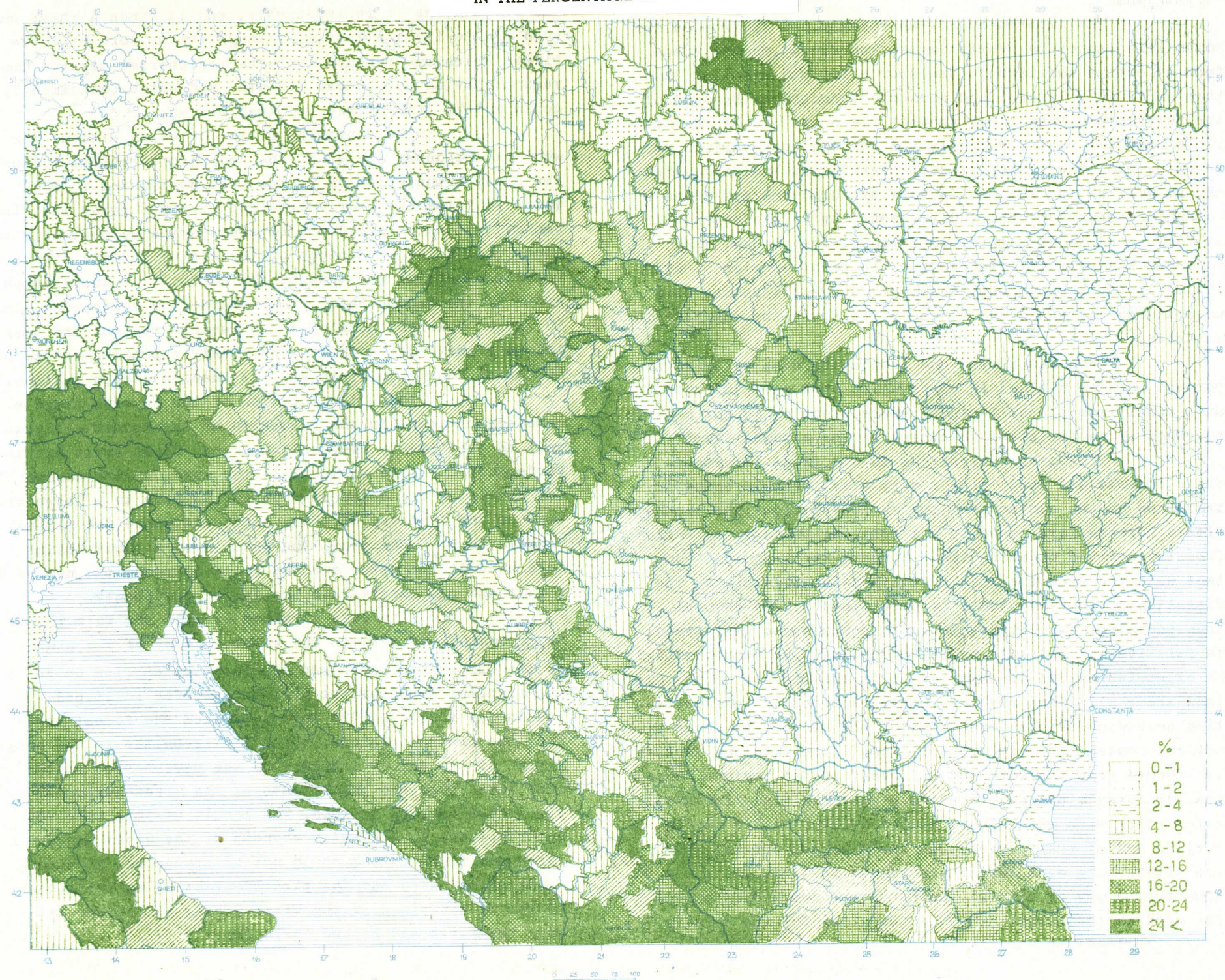
THE RENTABILITY OF MEADOWS AND PASTURES (1935)



The numerals indicate the average income of the meadows and pastures in pengos per one hectare

PASTURES

IN THE PERCENTAGE OF TOTAL AREA



pared with the dense and in large areas entirely closed coniferous and beech forest regions of the Alps or the Eastern Carpathians.

The importance of the forests and their wood for human life cannot be overestimated. The closed forest areas form effective barriers to transportation and settling, thus they serve as political and economic boundaries. The wood of the forests has been since ancient times one of the raw materials used the most frequently and for the most various purposes by man. The timber-products serving as building material, as well as for the manufacture of furniture and means of communication, have been indispensable up to the recent times. As fuel, wood is of great importance. Just today, when wood had lost its importance from the point of view of utilising it for the purposes mentioned above, its values have been discovered again and it cannot be spared by chemical industries.

Wood has played and is playing even today an important part in mining. In cases where open cast is impossible, and, apart from the salt-mines, where propping is not necessary, wood is as important in mining as the mineral itself.

The forest areas, due to the great importance of their forests and wood, play a very great part in economic trade and in the contacts of the various regions. The expansive closed forests form economic and settling boundaries, while forestry carried on along their borders keeps a close contact with the economic life of the non-forested areas. The direction of these contacts is determined by the natural transportation facilities, as wood, compared to its masses, is relatively of little value, accordingly it cannot afford an expensive way of transportation. In the forests of the highland areas slips and rivulets serve as means of transportation according to the directions of the slopes. By means of natural routes economic areas linking closely to one another are formed from the forested and non-forested regions. Where smaller forests and non-forested areas take place frequently alternating with each other, their interdependence may be varying and of many directions. Where larger forest areas are alternating with larger unforested regions, the connections by the way of natural routes have a commanding nature. The wood of the forest areas is essential for the Russian steppe regions; on the big rivers running from the north

to the south it can be easily and cheaply transported. For the Great Hungarian Plain the wood of the inner slopes of the Carpathians is indispensable, and it finds a cheap and good way to its destination through the network of those rivers which are running from the peripheries towards the regions having no central forests, and which economically could not be transported to other places.

The Roumanian Plain cannot do without the wood of the outer slopes of the Southern Carpathians, where its cheap transportation to the regions lacking in wood is facilitated by the rivulets and rivers flowing into the Danube, and which could not be transported economically to other places. The wood-stock of the Alpine forests finds equally a natural way towards the north, into the cleared areas of the Danube Basin, and towards the south, into the Po Plain. However, none of these western regions are lacking in forests and wood in such widely expansive areas, as the Great Hungarian Plain and the Russian steppe regions.

Thus, the location of the forests plays a considerable part in the formation of the economically, as well as politically cooperating areas. These areas are interdependent on one another, all the more, as the course of the rivers in the unforested plains depends to a large extent on the forestry of those highlands where the plains receive their water from. The clearings, without taking into account the water economy would increase the number of floods and completely ruin the diking equipments.

The most striking example for this is the close connection between the water economy of the plains of the Carpathian Basin and the forestry carried on in the highland areas of the Carpathians. The political boundaries fixed in 1920 have separated the forest areas from the central plateau, which fact resulted in the stagnation of the timber industry of the peripheries at the same time, when the inhabitants of the Great Hungarian Plain were lacking in wood. The result of this were the complications in the water economy of the Great Hungarian Plain and floods which could not be prevented. It also hindered to carry out the plan of creating an irrigation system in the plain of the Tisza during the period between the First and Second World War.

FOREST AREAS

