HISTORY OF THE DEVELOPMENT OF SOIL MAPPING.

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Anotation: *In this article, the history of soil mapping on a global scale during a certain period of time allows to trace the development of the science of geography and soil cartography.*

Key words: *soil zones, scale, map, scale, matrix, geographic zoning, congress, FAO, UNESCO.*

Kirish: The beginning of world mapping, as it turned out, is justified by the "scheme of soil zones of the northern hemisphere", compiled by V.V.Dokuchayev in 1889 on a scale of 1:50,000,000. It contained only eight sections, including five-wide soil zones, and was indeed one of the main soil cards of its time. At the same time, its fundamental importance is very great.

This soil card showed us for the first time that the distribution of soils on Earth is not chaotic, but of a natural and understandable character. In addition, the soil card compiled by V.V.Dokuchayev visually reflected the law of soil zoning.

This law, and the first soil card compiled for the work of later scientists, included K.D.Glinka (1906, 1915, 1927), L.I.Prasolov (1937), Kellogg (1938), D.G.The world, compiled by scientists such as Vilensky, became the foundation for the further development of soil maps.

Comparing these soil maps with each other, it can be noted that their greater quality and identification reflected an increasing diversity of World soils, and also brighter revealed the increasing complexity of the structure of the world soil cover and the detection of the distribution boundaries, geographical and genetic characteristics of different soils. While the first soil map of the world on K.D.Glinka showed only 18 soil sections,on L.I.Prasolov's map it reached 30, on I.P.Gyerasmov's map (1964) it was 93. From this it can be seen that soil mapping continues in constant development and cultivation, improving to the present day [1-5].

The main part: In the preparation of soil maps, scientists reflected various features as the main factors, including the soil maps of Dokuchayev and Glinka, which were mainly compiled by a deductive method based on certain relationships between natural conditions and the nature of the soil,

while the map of L.I. Prasolov and the maps of Gerasimov were created by various soil scientists. A lot of unique soils were obtained as a result of generalization of cartographic materials. Analysis of the development of world soil cartography based on the review of the indicated maps L.I. Prasolov (1939), I.P. Gerasimov (1945, 1957, 1966), D.G. Vilensky (1947), V.A. Kovda (1965) , M.A. Glazovskaya (1973), B.G. Rozanov (1977), G.V. Dobrovolsky (1982). A new soil map of the world was edited by V.A. Kovda, E.V. Lobova, G.V. Dobrovolsky and B.G. Rozanov at the international congress of soil scientists held in Moscow in 1974.

This structured soil card differed both cartographically and structurally from its predecessors. The map was based on 1: 10,000,000 massntab. In addition there were 300 units on the map, and the zonal and fascial boundaries of the soils, geochemical and evolutionary genetic views were also characterized by reflection. On the soil geochemical map, however, 12 soil-geochemical structure regions were isolated. The structured soil-geochemical map is briefly described by the reaction of soils, the composition of humus and secondary minerals, the directions of irradiation, the aopolitical directions of soil formation, and the climatic conditions of the regions in a position corresponding to the enumerated ones.

According to the above information, the soil map created by V.A.Kovda and others does not give an imkin to an extensive perfect and detailed description, which is followed by the previous ones ba lki Genesis and reflects new bounded areas and orientation in soil geography.

Currently, a special place among the tour maps is occupied by the FAO/UNESCO International soil map, which was compiled over a period of 20 years (1961-1978) on the recommendation of the International Society of soil scientists. One of the most basic advantages of this card is that it is developed on the basis of internationally agreed nomenclature and diagnosis of utproqlarl, which can respond to international templates. The nomenclature is derived mainly (Russian, French, German, Japanese, Polish, etc. Most of them were created sunially, based on Latin and Greek roots. And on this map, the undoubted advantages of the FAO/UNESCO map, in which 26 most kata units and 106 subunits are allocated, are the agreed international nomenclature and diagnostic criteria, the relatively large scale of the map and the saturation of the characteristics of cartographic units with large information.

This is why the FAO/UNESCO map is the most detailed modern soil map of the world. In addition, it is noteworthy that this map shows combinations

of soils (dominant and accompanying soils) that describe the topography and soil cover conditions [6-10].

To date, the creation of an electronic database and the use of maps in electronic form has become one of the urgent issues. These works (Nyerrain Digital database) 1:1 000 000 scale (Sotyer project). In addition to the advantages, previously I.P. Gerasmov (1969) notes some shortcomings of the FAO/UNESCO map.

As a result of numerous international studies and consultations held at the XV International Congress of Soil Science held in Mexico in 1994, it was decided to develop a World Abstract Database of Soil Resources (WRB) based on the FAO/UNESCO map. At the same time, in order to distinguish soil categories (or groups) of the first level, according to the nature of the soil-forming process that separates the soil, according to the signs that determine the most typical properties and characteristics of the soil, and at the second level, the scientific decision to separate the soil according to the nature of the accompanying soil-forming process accepted. The nomenclature in this map is based on the nomenclature of the FAO/UNESCO map.

In terms of the use of cards, it is appropriate to divide them into two large classes: 1. For production and several other directions, 2. For learning and implementation in the educational system. Among the works in this regard, M. A. Glazovskaya and V. M. Friedland (1978), among the first to study maps in the higher education system, are very interesting from the point of view of design and construction of the first soil map of the world for higher education. This map consists of two main maps (directions) and various table view applications.

1. In the "Soils" matrix (direction), nine soil water regimes are given horizontally, and three groups of soil temperature regimes vertically. Soil types mapped against the background of hydrothermal grouping are grouped into genetic groups according to leading soil processes. In total, the map combines 25 soil genetic groups with 110 soil unit types.

2. In the matrix "Soil Cover Structures", twelve genetic groups of soil cover mesostructure are given, and five complex and small contour compounds, which are components of mesostructures, are drawn horizontally. A special part of the map is notable for the distribution of parent rocks and their particle sizes.

Results of the study: The current work, soil survey maps, compared to the initial ideas reflected in the first world maps of Dokuchayev and Glinka, showed how complex and diverse the world's soil cover is [11-15].

In addition to the latitudinal and vertical zonation laws of soils defined by V. V. Dokuchayev, modern soil maps reflect soil-climate facies (units, regions) and other soil-bioclimatic and soil-geochemical laws manifested in the presence of soil. Including geochemical derivatives soil - geochemical fields. The first experiment was carried out to reflect the historical and genetic relationships of different types of soils on the world soil map, which indicate that hydromorphic conditions have changed in the automorphic states of soil formation in the history of development.

Soil - geographic zoning has developed significantly as one of the directions of soil geography, which allows not only to reflect the entire complexity of the structure of the soil cover in the most complete and systematic form at different levels of its organization, but also to understand it [16-21].

Conclusions: Due to the growing problems of protection and use of natural resources, the scientific and practical importance of soils and soil photography cartography has increased dramatically in our time. Development of scientifically based estimates on the use and assessment of land resources, regional specialization of agriculture, forestry and other sectors of the economy, development and implementation of large-scale land reclamation activities, protection of soil from destruction without considering sufficiently detailed and reliable world maps. not allowed. The recent experience of soil cartography shows that the further development of soil cartography is closely related to the development of the theory of soil genesis and geography and the increasing use of aerospace methods for soil cover studies..

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