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DATA MAPPING USING GIS TECHNOLOGIES IN SYSTEMATIC ANALYSIS AND SYNTHESIS OF SOCIO-ECONOMIC SITUATIONS

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Today, the increasing demand for socio-economic maps and atlases requires a new approach to the issue of comprehensive cartographic provision of science, education, population, management bodies, etc. In the new conditions, further development of theoretical and methodological aspects of socio-economic mapping, development of new types and types of population and economic maps, filling of socio-economic maps with new economic, social, political and ecological information, improvement of their creation and use methods are carried out. is increasing.

The first cartographic images containing population and economic descriptions appeared many thousands of years ago. However, economic cartography was formed as an independent branch of cartography only in the middle of the last century. Currently, mapping works are being carried out in many areas. Today, GIS is widely used in all sectors of the economy. In order to use GIS, it is necessary to collect a large amount of written and graphical geographical data related to the area. That is why it is necessary to collect geodata. That is why the geodatabase is an integral part of any GIS.

The geodatabase is created using special GIS programs. Taking into account the reforms currently underway in our country, as well as the fact that ESRI's ArcGIS program was chosen as the main GIS program for master's students studying under the Ge-UZ project, it is appropriate to use this program in the analysis process. It is also worth mentioning that with the help of this ArcGis program today, as in many developing countries of the world, GIS projects are being created in our country and their effective operation is being ensured. In order to create and effectively use geoinformation systems projects, it is necessary to have knowledge of geodatabases.

This new technology collects all the necessary information and shows it as a single object.

In the analysis of geographic information, the whole earth is connected to a single system through spatial data, the exact coordinates and location of the territory of Uzbekistan can be known on this basis, and a database is created. Examples of such technologies include Google Earth, SASPlanet, Mapinfo, ArcGISPro, ArcGISOnline. ArcGIS Pro is a complete 64-bit GIS software designed to replace ArcMap and its companion software. With ArcGIS Pro, it's easy to upload, use, and edit geospatial data directly into ArcGIS Online.

This app lets you share your geographic information with the world. On the other hand, you may receive data and information shared by other users. With this software, you can convert your geographic data into maps and actionable data. You can also create your own designs in a variety of standard formats and use dynamic features such as tables and charts. The program is also capable of determining spatial relationships. On the other hand, with this product, you can define locations and routes based on various criteria. ArcGIS Online is a cloud-based functional mapping and analysis system. It is used to create maps, analyze data, share and collaborate.

Maps and data can be entered into this system from anywhere in the world and from mobile devices in the field. Data and maps entered into the system are securely stored on the user's own infrastructure and can be used for mapping and other analysis. These technologies make analysis easy, reliable and complete. It is necessary to use foreign experience in the introduction of modern technologies in the development of social and economic indicators of the regions.

Acceleration of the rhythm of social life imposes the task of operationally providing scientific and practical needs with reliable and up-to-date cartographic data. In this, the introduction of the latest electronic technologies, which significantly speed up all processes of mapping, equipping and publishing, plays a big role. Even 10-20 years ago, efficiency was achieved only by traditional mapping and the publication of simplified low-circulation cartographic products, but now the use of GIS-technologies and the creation of databases to the printing of colorful map publications are used for all cartographic purposes. full automation of processes is becoming crucial.

When considering the issue of the operationality of socio-economic mapping, it is necessary to take into account the complexity of the editorial, authorship, compilation and publication processes in the preparation of complex atlases and large series of maps. The systematic scientific design of these works, the need for careful coordination of the subject, the content of the maps, the design and many others explains why their preparation period often took 10-20 years. The introduction of GIS-technologies completely restores all cartographic works and significantly speeds up the process of creating maps and atlases with the appropriate software. The latest electronic communication and computing tools for creating and publishing maps allow to fundamentally reorganize the process of providing planning and management bodies with current economic statistics data, which are instantly transferred into cartographic form at the time of receiving statistical data.

It is a more difficult task to quickly provide science and practice with cartographic materials, including forecast and recommended cartographic documents, reflecting the results of a systematic analysis and synthesis of the current or future socio-economic situation. Very fast cartographic provision of analysis, forecasting and elimination of the consequences of emergency environmental, political and socio-economic situations is of particular importance, and all this requires socio-economic mapping.

Socio-economic cartography is the science of creating and using thematic maps of the population, economy, service sector, social and political life to ensure socio-economic development, science, education and culture. He deals with the methods and methods of drawing up socio-economic maps, spatial analysis and modeling, and

defining prospects for the development of socio-economic mapping. The areas of use of socio-economic maps are extremely diverse. They are an integral part of the scientific field, and are used as a source of factual data to determine the laws of location and development of phenomena and territorial systems, to generalize the established relationships and laws, and to monitor economic and social processes with high dynamics in space and time. In practical activities, socio-economic maps serve as information-reference materials in the management and planning of economic and social spheres, or operational documents to ensure current work, as well as project-prognostic materials to determine trends in the development of events by modeling scenarios.

Sources of socio-economic indicators are provided with statistical information. Analysis is impossible without these sources. It is possible to achieve a more accurate and better result if the analysis is conducted mainly on the basis of five-year indicators. The statistical method is one of the most effective methods in the analysis of regional development indicators. It will be possible to determine the level of development of economic and social development indicators on the basis of statistical analysis. The main source of information is the official statistics, which are part of the state information resources and provide an idea of the current state of the national economic sectors, changes in the population's standard of living, number, demographic, social, medical and other indicators. and provides information.

In the analysis of economic and social indicators, accounting and statistical sources have almost completely determined its content and methods of description. Currently, the use of GIS technologies and the creation of a database are becoming crucial for the complete automation of information needed in all areas, as well as in economic life.

It is a more complex task to quickly provide science and practice with statistical data, cartographic materials, including forecast and recommended cartographic documents, reflecting the results of a systematic analysis and synthesis of the current or future socio-economic situation. In particular, a convenient, fast and sophisticated technology is necessary for the analysis and synthesis of economic data. It is certainly more convenient to use modern technology to solve such problems. Also, it is very convenient to use GIS technologies in the analysis of social development indicators. In particular, it is possible to cite a number of indicators in population registration, employment level and others.

Geographic information systems can be used in natural resource management, socio-economic fields, construction and oil and gas fields, as well as geodesy and cartography.

GIS occurs in a variety of situations, including:

in the process of placing new clinics and hospitals in the health sector geographically suitable and convenient for the population;

in drawing up and determining road routes and schedules for enterprises engaged in cargo transportation;

construction of new trade complexes for surveyors and choosing a location for them;

in updating the condition of forests and building recreation parks for forestry enterprises;

when choosing the most optimal option for the design of new highways and roads for highway construction enterprises;

in the correct and reasonable calculation of land in the state fund;

for travelers, finding suitable hotels, travel destinations and, of course, the right direction;

it is very useful for farmers in developing new lands, determining the condition of the lands and obtaining sufficient information about them.

In addition, GIS is used in ecology and environment use, marine, aviation and car naviGISion systems, urban planning, marketing, emergency management and planning, sociology, political science and other fields.

A number of benefits arise from the use of GIS in geodesy and especially economic fields. In this case, the volume of work increases sharply, and the time spent on data processing and printing is sharply reduced. In addition, the quantity and quality of work related to obtaining information will increase.

In conclusion, the mapping of socio-economic indicators with the help of GIS technologies helps to receive data clearly and comprehensibly. Also, in the process of data analysis, it is important to develop the necessary conclusions and make forecasts.

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МИНТАҚАВИЙ ИҚТИСОДИЁТНИНГ ИЛМИЙ-АМАЛИЙ КОНЦЕПЦИЯСИ

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Миллий иқтисодиётни ривожлантириш ҳар бир минтақанинг қўшган оқилона ҳиссасини ҳисобга олган ҳолда амалга ошириладиган чора-тадбирлар тизимидир. Демак, минтақалар ва умумий вазиятга таъсир қилувчи омиллар тизимига қараб миллий иқтисодиёт ривожланиб боради.

Албатта, миллий иқтисодиётни ривожланиши мамлакатни ташкил этувчи минтақаларнинг ресурслар билан таъминланганлиги ва улардаги сезиларли фарқлар, минтақа иқтисодиётининг тузилиши ва турли тармоқларнинг ривожланиш даражаси билан боғлиқ. Шу боис, миллий иқтисодиётни