

The financial and credit policy of the state in agriculture is designed to stimulate increased production efficiency, restructuring and adapting commodity producers in the new market environment, developing market infrastructure, supporting strategically important production and facilities, and creating conditions for normal competition in foreign and domestic markets.

A reduction in the rate of inflation, the refinancing rate of the National Bank of the Republic of Kazakhstan and, accordingly, the rates of interbank and commercial lending will primarily contribute to alleviating the problem of credit in agriculture. Preferential loan should focus on the profitability of the industry, which will ensure its repayment. This will allow the state to stop the vicious practice of large-scale extensions, and the establishment of contractual and competitive relations in lending - to avoid responsibility for the borrower .

The village needs a special system of monetary lending with a relatively high level of state support. In this regard, concessional lending should be competitive, secured return, public, dependent not on administrative decisions, but on the economic interest of the subjects participating in it. Direct government intervention in the credit market should be replaced by government guarantee of loans for the village, work through commercial structures (banks, market actors, etc.).

Analysis of the theory of credit and the practice of financial and credit services for small and medium-sized businesses makes it possible to put forward a definition of a credit system as an economic category, which means a clear interaction of elements of an organizational structure using financial and economic levers, tools and methods for entering into credit relations and fulfilling conditions based on full-fledged legislation to meet the objective financial needs of small and medium-sized businesses.

THE CALCULATION OF INDICATORS OF ANTHROPOGENIC LOAD AND THE LEVEL OF COMFORT STAY WITH INNOVATIVE TECHNOLOGY AND MATHEMATICAL METHODS

Bakunova Oksana Mihaylovna

researcher of technical sciences, master of technical sciences, Belarusian state university of informatics and radioelectronics, senior lecturer, teacher of department information systems and networks, master of engineering, Belarus

In the modern developing world in the field of IT technologies, there is a huge amount of method and methods for calculating indicators of environmental pollution from simple ball scales and mathematical formulas to huge software systems that use innovative technologies.

The tasks of monitoring the state of the environment and assessing the anthropogenic load are very relevant at present due to the increase in industrial, transport, agricultural, radiation and recreational pollution. We propose to use the method of finite predicates for computer modeling of this subject domain, which first of all allows solving the problem of bringing a multitude of heterogeneous indicators to a single form. The proposed approach to building the knowledge base of the diagnostic system uses knowledge representation in the form of a finite predicate defined on a set of characteristics. When solving problems of pattern recognition associated with the search for implicative regularities, one must face the problem of checking the completeness of the system of prohibitions. which can be considered as a generalization of the well-known NP-complete problem on the feasibility of the CNF of a

Boolean function, namely: as a problem on the feasibility of the CNF of a finite predicate, which in the language of matrices is formulated:

Let K be a Boolean matrix partitioned along columns. It is required to find out whether there is at least one covering for it, that is, whether there is a subset of columns taken exactly one from each section, which together would contain at least one unit in each row of the matrix. It was experimentally established that for the classical feasibility problem there exists a so-called critical interval of parameter values, in which really difficult individual problems lie. Therefore, it makes sense to identify the patterns between the sizes of the original matrix and its feasibility. In this connection, the mathematical expectations of some random variables were calculated, one of which, for example, is the average number of E matrices of a given size that do not have coverage.

Based on the finite predicate method, a PS can be created that will help achieve the goal of identifying the most dangerous (unfavorable) zones for The software package for assessing the anthropogenic load the reasons why the region is unfavorable, helps the state authorities draw conclusions and forecasts based on the already available data and preventive notification of a possible danger in the region, develops recommendations for activities for people living in unfavorable zones, generates statistical reports, has a clear user interface - this method is good visualized, and this model is universal and makes it possible to choose the comparison and forecast for the set of indicators that are necessary for the volume or a different expert. The finite predicate method allows to scale well, regardless of the amount of data, and this system can be used for integration into existing systems for collecting statistics on the state of the environment.

FINITE PREDICATES FOR COMPUTER MODELING THE TASKS OF MONITORING THE STATE OF THE ENVIRONMENT AND ASSESSING THE ANTHROPOGENIC LOAD

Bakunova Oksana Mihaylovna

researcher of technical sciences, master of technical sciences, Belarusian state university of informatics and radioelectronics, senior lecturer, teacher of department information systems and networks, master of engineering, Belarus

Bakunov Alexander Mihaylovich

master of technical sciences, Belarusian state university of informatics and radioelectronics, senior lecturer, teacher of department information systems and networks, master of engineering, Belarus, Minsk

Burkin Anton Vladimirovich, Vatalev Mikhail Andreevich, Pavlovsky Dmitry Alexandrovich

students of Belarusian state university of informatics and radioelectronics, Belarus, Minsk

The tasks of monitoring the state of the environment and assessing the anthropogenic load are very relevant at present due to the increase in industrial, transport, agricultural, radiation and recreational pollution. There is a bunch of method and methods for calculating anthropogenic load from simple mathematical formulas to huge software systems. We offer to use the method of finite predicates for computer modeling of this subject domain. The main advantage of this method is fast computing and high accuracy on large datasets. Using the