SUMMARY

INTRODUCTION

This article attempts to investigate the features and evaluate the effectiveness of enterprises' location at various stages of the production cycle in the Arctic zone of the Russian Federation. The study is based on the organizations' placement of reindeer husbandry, fishing, processing of fish and deer meat. Today, the Arctic zone is one of the priority areas of spatial territories development and an important element in the formation of Russian economic potential. The production of industrial and agricultural products forms the basis of the real sector of the economy. Therefore, spatial placement, which allows these enterprises to interact with each other in an optimal way, is important for the efficiency of their work. The optimal geographical location of enterprises in related fields allows to use labor and other resources rational.

FEATURES OF TRADITIONAL INDUSTRIES' ENTERPRISES IN THE ARCTIC ZONE

Currently, the food supply of the Arctic regions of Russia is based on a combination of its own agro-industrial complex, food production development, and the import of products. The role of traditional industries, such as reindeer husbandry and fishing, is especially high for the indigenous peoples of the North, whose lifestyle directly depends on the existence of these industries. The reindeer husbandry plays an important role in the life of the indigenous peoples of the North, since this industry widely covers the territory of the Arctic regions and at the same time helps to preserve the ethnos of the indigenous peoples. Along with reindeer husbandry, an important branch of the agro-industrial complex on the territory of the Arctic zone is fishing. Fishing is considered to be one of the most common occupations and the basis of indigenous peoples' lifestyle. Indigenous peoples can engage in fishing without restrictions, except for catching rare and endangered species of fish. The development of traditional industries in the Arctic zone of the Russian Federation is hampered by infrastructural, technological, and economic obstacles. These problems may be partially solved by searching for new ways of more rational enterprises' placement to make it possible to supply products over longer distances than now. This, in turn, will allow expanding sales markets, making products more recognizable, establishing new partnerships, attracting foreign and domestic investors, and introducing new technologies.

Spatial analysis is one of the main methods to evaluate and interpretate economic and geographical data. The method allows to conduct a study of relationships of enterprises, including neighborhood analysis, network analysis, hotspot analysis, emission analysis. This method also helps to explain the relationship and features of the data used, as well as to identify spatial and temporal patterns

of placement. With the help of spatial modeling and geographic information system maps of the location of reindeer herding, fishing, and processing enterprises were built.

CONCLUSIONS

Maps of the geographical location of reindeer herding, fishing, and processing enterprises, as well as the results of spatial analysis carried out within this study, allowed us to highlight the main features:

- 1. The analysis of empirical data shows that there is a high density of enterprises of traditional sectors in the Arctic zone: fishing and reindeer husbandry. The density of enterprises in the west is higher, but this can be explained by a higher population.
- 2. Enterprises for processing products obtained by traditional industries are located in a limited number of places (5 deer meat processing enterprises, 11 fish processing enterprises). This can be partly explained by the fact that the primary processing of products is carried out by the own efforts of fishing and reindeer herding enterprises. This is confirmed by the fact that for many of the enterprises we have considered, the manufacturing industry acts as an additional type of activity.
- 3. The dispersion of enterprises of the activities under consideration (more than 500 km) may indicate a high level of competition in the industries. On the one hand, it is good and may help enterprises to develop their work process. But on the other hand, it hinders the process of spreading new technologies, innovations, knowledge and improving the quality of human capital. The processes of creating and increasing the density of networks with larger technically equipped processing plants may help to eliminate these shortcomings without losing the positive features. This study did not conduct a network analysis of the interaction of enterprises, so this limitation was not considered. However, based on the data about the distance between enterprises and related activities, interaction between them may be difficult, especially due to the problems of the Arctic transport infrastructure.

ПРИЛОЖЕНИЕ 1



Рис. 1. Геокарта размещения предприятий оленеводства и переработки мяса оленя. Источник: составлено авторами.