

Research on Population Statistics Issues and Countermeasures Under the Background of Rapid Economic Development

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Abstract: Since the reform and opening up, China has achieved remarkable achievements in socialist modernization. Entering the new era, the social economy has achieved rapid development, and population statistics has become an important part of social development in this process. This paper analyzes population statistics against the backdrop of rapid economic development, and proposes corresponding solutions based on the analysis of existing problems in population statistics. The purpose is to enhance the standardization of population statistics, provide strong support for social and economic development, and promote the healthy and sustainable development of the social economy.

Keywords: Economic Development; Population Statistics; Problems and Countermeasures

1. Introduction

Since ancient times, population has been a key issue in the process of social and economic development. The size of the population directly determines the driving force for a country's economic development; the population structure affects industrial layout and resource allocation efficiency; and the population quality is related to scientific and technological innovation and sustainable development capabilities. Against the backdrop of rapid economic development, accurate population statistics data serves as an important basis for formulating macroeconomic policies and provides fundamental support for the rational allocation of social resources and the promotion of coordinated regional development. With the transformation of the economic structure and the increasing frequency of population mobility, improving the accuracy and timeliness of population statistics has become

a crucial issue that needs to be addressed urgently.

2. Problems in Population Statistics Under Rapid Economic Development

2.1 Inconsistent Statistical Standards

Against the backdrop of rapid economic development, the importance of population statistics has become increasingly prominent, as it serves as an important basis for the country to formulate population policies and development plans. However, in current practical population statistics work, there exists the problem of inconsistent statistical standards. Different regions and departments adopt different statistical scopes, classification standards, and indicator definitions when collecting population data. This inconsistency reduces the comparability between data, making it difficult to conduct cross-regional and cross-departmental comprehensive analysis and comparative research. Moreover, it affects the accuracy and authority of population statistics data, creating difficulties for government decision-making and academic research.

2.2 Difficulties in Counting Floating Population

Population mobility is an objective law of social development. Throughout history, population mobility has always existed due to various reasons. In the context of modern society, due to the imbalance of regional economic development, population mobility remains a prominent issue. However, counting such floating population poses great difficulties in the process of population statistics. Statistical departments find it hard to accurately grasp the size, structure, and distribution of the floating population. At the same time, the statistics of the floating population involves the dual statistical dilemma of household registration places and

places of residence. Factors such as the uncertainty of the floating population's residence time and the dispersion of their living places increase the complexity and difficulty of statistical work.

2.3 Outdated Statistical Methods

The most traditional and conventional method of population statistics relies on regular national censuses. This method has long been an effective way of population statistics in the traditional economic era. However, in the era of rapid economic development, this traditional population statistical method is obviously outdated. Nevertheless, some underdeveloped regions still adopt this traditional population statistical strategy, and its drawbacks have gradually become apparent. On the one hand, the long cycle of regular national censuses makes it difficult to capture the dynamic changes of the population in real time, especially the frequent migration of the floating population. On the other hand, with the continuous growth of the social population, this traditional statistical method can hardly meet the needs in terms of data processing and analysis. It is unable to carry out in-depth data mining and analysis, which affects the timeliness and application value of population statistics data.

3. Solutions to Population Statistics Problems Under Rapid Economic Development

3.1 Establishing Standardized Population Statistical Standards

Under rapid economic development, population statistics requires the formulation of statistical methods that are in line with the development of the times and the current population context, and the implementation of effective population statistical strategies from various dimensions to provide strong data support for the formulation of national population policies and the stable development of the social economy^[1]. First, it is necessary to carry out top-level design and formulate unified population statistical standards, clarify the connotation and extension of statistical indicators, and ensure that different regions and departments adopt consistent standards and methods in the statistical process. Meanwhile, a standardized statistical process

should be established, covering all links of data collection, sorting, and analysis to ensure the accuracy and comparability of data. In addition, to ensure the authenticity and accuracy of data, standardized population statistical classification standards should be formulated, and classification dimensions should be refined according to different population characteristics and statistical needs. In this way, more comprehensive and detailed population information can be collected during the statistical process, avoiding data deviations caused by ambiguous classification. At the same time, a dynamic adjustment mechanism for classification standards should be established. With the development of the social economy and changes in the population structure, the classification standards should be optimized and improved in a timely manner to ensure that the population statistical classification is always consistent with the actual situation, thereby improving the quality and application value of population statistics data. Second, a standardized population statistical process should be built, and a refined population statistical plan should be formulated. From the beginning of population statistics to the final analysis of results, it is necessary to ensure that there are no omissions in each link. In the data collection stage, a variety of reliable channels should be used to ensure the comprehensiveness and authenticity of data. In the data sorting stage, scientific classification and coding methods should be adopted to make the data organized and easy for subsequent analysis. For data analysis, advanced statistical models and analysis tools should be used to conduct in-depth mining of the laws and trends behind the data. A strict quality control system should also be established to conduct regular inspections and evaluations of each link. Once problems are found, they should be corrected in a timely manner to ensure the effective implementation of the standardization of the population statistical process and the refinement of the statistical plan^[2]. In addition, it is necessary to strengthen the publicity of population statistics work, so that the public can understand the purpose and significance of population statistics and better cooperate with the work. Various media channels can be used for extensive publicity, and population statistics knowledge can be popularized to the public in

a vivid, interesting, and easy-to-understand way, answering the public's questions. In this way, population statistics work can be truly implemented among the masses, stimulating the enthusiasm of the masses to participate in and cooperate with population statistics work, and further improving the authenticity and accuracy of population statistics data^[3].

3.2 Scientific Classification of the Floating Population

The floating population has always been a key and difficult issue in population statistics work. Against the backdrop of rapid economic development, population mobility has intensified, and this dynamic population state has made population statistics work more difficult. However, such population mobility cannot be restricted, so it is necessary to formulate corresponding statistical methods and strategies for the floating population to ensure the accuracy of population statistics data. First, the floating population should be classified according to the reasons for mobility, and more targeted statistical methods and policy measures should be formulated based on the characteristics and needs of different types of floating populations. The floating population can be divided into those who move due to job transfers, those who move for education, and those who move for family reasons. For those who move due to job transfers, an information sharing mechanism can be established with employers to obtain their mobility information in a timely manner. For those who move for education, cooperation with schools can be carried out to grasp the information of population enrollment, graduation, and other time nodes. For those who move for family reasons, statistics can be conducted through community registration and other methods. Such classified statistics can more accurately grasp the dynamics of the floating population and improve the quality of population statistics data. Second, the floating population should be classified according to the length of their mobility time, which can be divided into short-term mobility, medium-term mobility, and long-term mobility. Classified statistics of the floating population can help to more clearly grasp the dynamic changes of the floating population. For short-term floating population, regular sampling surveys combined with big data tracking can be

adopted to quickly obtain mobility information. For medium-term floating population, who usually stay in the inflow area for about half a year to two years, a special registration and management system for the floating population can be established, requiring them to update their information regularly at designated places. At the same time, cooperation with relevant enterprises and communities can be carried out to timely grasp changes in the work and living conditions of the floating population. For long-term floating population, who stay in the inflow area for more than two years, they can be included in the statistics of permanent residents, and statistics and management can be carried out in accordance with the management methods of permanent residents. They should be provided with public services equal to those of permanent residents to enhance their sense of belonging and stability. Such classified statistics based on the length of mobility time helps to improve the pertinence of population statistics^[4].

3.3 Adopting Advanced Technologies for Population Statistics

Under the background of rapid economic development, population statistics work also needs to keep pace with the development of the times, continuously innovate, and actively adopt advanced technologies to carry out population statistics, so as to improve the accuracy and objectivity of population statistics. First, big data analysis technology can be introduced, which can not only improve the efficiency of data analysis but also accurately grasp the situation of the floating population. Through big data analysis technology, in-depth mining of multi-dimensional information such as the travel rules, employment tendencies, and living preferences of the floating population can be carried out. By analyzing mobile phone data, the activity scope and trajectory of the floating population in different time periods can be clearly understood; by using social media data, their social circles and hobbies can be analyzed, so as to more comprehensively grasp their living conditions. Second, artificial intelligence technology can be used for the classification of population statistics, intelligently classifying and predicting a large amount of population statistics data, predicting population mobility trends in advance, and

providing a scientific basis for decision-making in population statistics work. In addition, in the information age, the combination of UAV aerial photography and geographic information systems (GIS) can also provide strong data support for population statistics. UAV aerial photography can quickly obtain geographic image information of large-area regions. Combined with the powerful data processing and analysis capabilities of GIS, geographic elements closely related to population distribution, such as buildings and residential areas, can be accurately identified. Through comparative analysis of aerial images in different periods, the changes in the number of regional populations and the expansion or contraction of living spaces can be clearly observed. Moreover, GIS can conduct spatial modeling of aerial photography data, simulate the distribution patterns of the population in different geographical environments, and provide more intuitive and accurate spatial data for population statistics, improving the efficiency and quality of population statistics work^[5].

4. Conclusion

Under the background of rapid economic development, population statistics has become an important part of social and economic development, which is related to the long-term development of the country and the stability of the social economy. It is necessary to formulate targeted population statistical methods based on the characteristics of the times and the specific conditions of different regions, and continuously promote the standardization and intelligent development of population statistics to provide strong support for the continuous progress and rapid development of the social economy. In future development, it is necessary to continue to

explore new population statistical methods and strategies to meet the needs of social and economic development and provide detailed and reliable data support for the country to formulate scientific and reasonable population policies and economic plans.

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