

Session title: Big Data on Population and Health Helps Achieve the Sustainable Development Goals

Session Organizer: China Population and Development Research Center Short Description

Population is the basic element of national economic and social development, and health is an important goal of sustainable development. The collection, integration and application of population and health data provides key support for optimizing economic and social decision-making and achieving the Sustainable Development Goals. Traditional population and health data mainly come from conventional statistical sources such as censuses, special surveys and administrative records. With the popularization of digitalization and information technology, big data from the Internet, location-based services (LBS), remote sensing, navigation, geographic information and other massive behavior records generated by application services provide an important supplement to traditional data. It provides new opportunities for comprehensive, accurate and real-time monitoring of population and health levels and characteristics. This session invites contributions from the above topics to address SDG 3, 11, and will focus on the integration and application of traditional data and big data to discuss possible future research directions and topics.

Objectives

This session brings together expertise in multi-source big data such as population, health, geographic information, and mobile signaling data, as well as their in-depth application in population monitoring, health assessment, and urban planning.

Expected Results

Audience of 50; Promote the collection and application of population and health data and strengthen SDGs monitoring and evaluation capacity.



Agenda

Time 13:30-15:00, September 6th, 2023 Room: 201 B Moderator:



ZHANG Xuying
Deputy Director-general
China Population and Development Research Center

Mr. ZHANG Xuying, Deputy Director-general and researcher of China Population and Development Research Center; Ph.D. in Economics; Standing member of the board for China Population Association; Expert enjoying special government allowance of the State Council; Expert to the Seventh National Census Advisory Committee; Consultant to the National Territorial Plan (2020-2035) development; having long been engaged in researches on population policy, population projection, among others.

Participants

Event 1 (13:30-13:45)

Geodemographic big data obtained from small area population projections and their applications



Takashi Inoue

Professor

Department of Public and Regional Economics, College of Economics, Aoyama Gakuin University

Dr. Inoue is a professor of demography at Aoyama Gakuin University and a vice president of the Population Association of Japan. His recent work is to conduct small area population projections for many regions in the world and to construct a web mapping system for each country/region using the big data generated by those projections. He has already released web mapping systems for Japan, the State of Washington (the US), Taiwan, and the US, and is developing a few web systems for other countries. Dr. Inoue received some awards from the Population Association of Japan, the Association of Japanese Geographers, and so on. He served as a co-chair of the International Conference on Population Geographies 2022.

Event 2 (13:45-14:00)

Comprehensive evaluation and influencing factors of healthy cities in China urban agglomerations based on multi-sourced urban data





WU Kang
Professor
Beijing Key Labortory of Megaregions Sustainable Development Modelling, Capital University of Economics and
Business

Dr. WU Kang is the professor and director of Beijing Key Labortory of Megaregions Sustainable Development Modelling at Capital University of Economics and Business. His research interests include urban economic geography and spatial planning. His most recent research focus on polycentric city regions and urban networks, urban big data analysis, and the sustainable development of shrinking cities in China. His ongoing research is to understand the urban growth and urban shrinkage from a network perspective, especially to reveal the mechanism of urban growth and shrinkage based on the framework of telecoupling and local coupling by using multi-source data. His research also simulates the urban growth and shrinkage according to scenario analysis and puts forward the urban sustainable mode and strategy of urban policy. His research findings in terms of shrinking cities in China has been accepted by the Central Government, and his policy suggestions has been incorporated in the "Key Tasks on the New- type Urbanization Construction" issued by the National Development and Reform Commission in 2019 and 2020.

Event 3 (14:00-14:15)

The application of mobile big data in demographics statistics



GU Yang
Chief Section III
Census Division, Department of Population and Employment Statistics, National Bureau of Statistics of China

GU Yang participated in the seventh national population census and multiple population sample surveys, and has rich experience in sampling and data processing. At present, he is mainly engaged in the application research of mobile phone big data in annual population statistics. Together with his colleagues, he formulated the application plan of mobile phone big data, determined the statistical standards, and achieved some results in population migration calculation.



Event 4 (14:15-14:30)
Trends and features of China's population in the 14th Five-Year Plan (2021-2025) and the medium and long term



LIU Houlian Associate Researcher China Population and Development Research Center

Dr. LIU Houlian is an associate researcher from the China Population and Development Research Center. He has graduated from the School of Economics of Nankai University, also a member of the China Population Association and a reviewer of several core journals such as Population Research. At present, he is mainly engaged in population and development research, and continues to study population trends, demographic dividend, population aging, and population and economic development issues. He has undertaken the National Social Science Foundation project, published two monographs, and published over 20 papers.

Event 5 (14:30-14:45)
Using population big data to service disease control monitoring, early warning and emergency command



ZHAO Hua Chief Marketing Officer SmartSteps Data Technology Co., Ltd

Ms. ZHAO Hua has been working in the field of innovation and transformation for telecommunications operators for a long time, responsible for brands, operations, and business innovation such as ICT, cloud computing, and data technology. In recent years, she has led a team dedicated to deep cooperation with multiple national ministries, urban planning agencies, large financial institutions, well-known enterprises and universities, and has made leading case demonstrations. The company has become the first service provider of economy, employment, city and statistics. This report will share the principles and application demonstrations of population big data technology based on mobile signaling, especially the practice and exploration of its application in multiple scenarios such as infectious disease monitoring, early warning, and emergency command.



 $\label{thm:continuous} Event \ 6 \ (14:45\text{-}15:00)$ Introduction on health-related indicators of the Sustainable Development Goals (SDGs)



CAI Yue
Associate Researcher
Center for Health Statistics and Information, National Health Commission of China

Serving as the United Nations (UN) Sustainable Development Goals China focal point, the World Health Organization (WHO) Vital Registration work China focal point, and a member of the Health Statistics Special Committee of the China Health Information and Health Big Data Association. Engaged in long-term health statistical work, involved in establishing the working mechanism between the National Health Commission and the National Bureau of Statistics on life expectancy estimation, and drafting guidelines for health statistical work. Conducted in-depth analysis of health and medical big data, including estimation of life expectancy and Healthy Life Expectancy (HLE), research on disease spectrum transformation, analysis of disease and economic burden, etc. As a principal investigator, led national key research and development project, National Natural Science Foundation project, WHO biennial planning projects, and projects by the Children's Foundation. As a sub-project leader/core member, participated in major national social science project and technology support projects. Published over 40 academic papers.